



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 145345

**TO: Janet Epps-Ford
Location: REM-2C05/2C18
Art Unit: 1635
Wednesday, February 16, 2005
Case Serial Number: 10/001863**

**From: Paul Schulwitz
Location: Biotech-Chem Library
REM-1A65
Phone: (571)272-2527**

paul.schulwitz@uspto.gov

Search Notes

Examiner Epps-Ford,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz
Technical Information Specialist
STIC Biotech/Chem Library
(571)272-2527



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Schreiber, David

From: Epps-Ford, Janet
Sent: Friday, February 04, 2005 1:53 PM
To: Schreiber, David
Subject: 10/001863-Score over length.

Please perform a score over length search of SEQ ID NO: 3 of application no. 10/001863.

Search for compounds that are 8 to 80 nucleobases in length, having at least 75% identity to SEQ ID NO: 3.

Please search all commercial and patent (issued and published) nucleic acid databases.

Thanks,

*Thanks,
Janet L. Epps-Ford, Ph.D.
Ant Unit 1635
Mailbox: Remsen 2C18
Office: Remsen 2C05
Phone: 571-272-0757
Fax: 571-273-0757*

2/4/05

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: February 16, 2005, 09:21:39 / Search time 7 Seconds
(without alignments)

3.412 Million cell updates/sec

Title: us-10-001-863-3

Perfect score: 3811

Sequence: 1 acagggcactgtctcac.....tctcactgacagagaacta 3811

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 153 seqs, 3134 residues

Total number of hits satisfying chosen parameters: 306

Minimum DB seq length: 8

Maximum DB seq length: 80

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 153 summaries

Database : rgedb.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result	No.	Score	Query Match %	Length	ID	Description
1	33	0.9	33	1	BD161165	ACCESSION:BD161165
2	30	0.8	30	1	AX057533	ACCESSION:AX057533
3	29.4	0.8	31	1	AX057532	ACCESSION:AX057532
4	28.4	0.7	30	1	AX057530	ACCESSION:AX057530
5	27	0.7	27	1	AX057531	ACCESSION:AX057531
6	26	0.7	26	1	AX057507	ACCESSION:AX057507
7	24	0.6	24	1	CQ873743	ACCESSION:CQ873743
8	24	0.6	24	1	AX057505	ACCESSION:AX057505
9	24	0.6	24	1	AX057510	ACCESSION:AX057510
10	24	0.6	24	1	BD102554	ACCESSION:BD102554
11	23	0.6	23	1	AX057483	ACCESSION:AX057483
12	23	0.6	23	1	AX057487	ACCESSION:AX057487
13	23	0.6	23	1	AX057496	ACCESSION:AX057496
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15	22	0.6	22	1	AX057486	ACCESSION:AX057486
16	22	0.6	22	1	AX057506	ACCESSION:AX057506
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62	17	0.4	20	1	AR216067	ACCESSION:AR216067
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68	16.2	0.4	21	1	AR137361	ACCESSION:AR137361
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80	15.8	0.4	19	1	AR275546	ACCESSION:AR275546
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C 118	15.4	0.4	20	1	I25313	ACCESSION: I25313
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C 133	15.2	0.4	20	1	AR233731	ACCESSION: AR233731
C 134	15.2	0.4	20	1	AR307940	ACCESSION: AR307940
C 135	15.2	0.4	20	1	AR311481	ACCESSION: AR311481
C 136	15.2	0.4	20	1	AR337006	ACCESSION: AR337006
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C 138	15.2	0.4	20	1	AX544171	ACCESSION: AX544171
C 139	15.2	0.4	20	1	AX742328	ACCESSION: AX742328
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C 142	15.2	0.4	20	1	AX962873	ACCESSION: AX962873
C 143	15.2	0.4	20	1	BD070557	ACCESSION: BD070557
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C 149	15	0.4	17	1	AX217777	ACCESSION: AX217777
C 150	15	0.4	17	1	AX217778	ACCESSION: AX217778
C 151	15	0.4	20	1	AR085548	ACCESSION: AR085548
C 152	15	0.4	20	1	AR216068	ACCESSION: AR216068
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ALIGNMENTS

RESULT 1	BD161165	33 bp	DNA	linear	PAT 17-JAN-2003
LOCUS	BD161165				
DEFINITION	Protein participating in mechanism for preventing infection and gene encoding the protein.				
ACCESSION	BD161165	1	GI:27866923		
VERSION	BD161165	1	GI:27866923		
KEYWORDS	JP 2002176986-A/3.				
SOURCE	synthetic construct				
ORGANISM	artificial sequences.				
REFERENCE	1 (bases 1 to 33)				
AUTHORS	Yoshihiki Y., Matsuguchi, T. and Iwami, K.				
TITLE	Protein participating in mechanism for preventing infection and gene encoding the protein				
JOURNAL	Patent: JP 2002176986-A 3 25-JUN-2002;				
	NAGOYA INDUSTRIAL SCIENCE RESEARCH INSTITUTE				
COMMENT	OS Artificial Sequence				
	PN JP 2002176986-A/3				
	PD 25-JUN-2002				
	PF 14-DEC-2000				
	JP 2000380561				

PI YASUNOBU YOSHIKAI, TETSUYA MATSUGUCHI, KENICHIRO IWAMI PC C12N15/09, C07K14/705, C12N1/15, C12N1/19, C12N1/21, C12N5/10// PC C12P21/02. PC (C12N5/10, C12R1.91), C12N15/00, C12N5/00, (C12N5/00, C12R1.91) CC Description of Artificial Sequence: cDNA to sequence 2 FH Key Location/Qualifiers									
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	/db_xref="taxon:32630"								
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Best Local Similarity	100.0%;	Pred. No. 5;							
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Db	1	GAAAGCTGGAGCCCTCGTGAGACTTGGCCC	33						
RESULT 2									
AX057533/c	LOCUS	AX057533	Sequence 69 from Patent WO0077204.	30 bp	DNA	linear	PAT 17-JAN-2001		
	DEFINITION	AX057533							
	ACCESSION	AX057533.1	GI:12310267						
	VERSION								
	KEYWORDS								
	SOURCE								
	ORGANISM								
	REFERENCE								
	AUTHORS								
	TITLE								
	JOURNAL								
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Best Local Similarity	100.0%;	Pred. No. 8.4;							
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Qy	1706	AGCATTTAACTCACTCTCGAGTTCAGGT	1735						
Db	30	AGCATTTAACTCACTCTCGAGTTCAGGT	1						
RESULT 3									
AX057532	LOCUS	AX057532	Sequence 68 from Patent WO0077204.	31 bp	DNA	linear	PAT 17-JAN-2000		
	DEFINITION	AX057532							
	ACCESSION	AX057532.1	GI:12310266						
	VERSION								
	KEYWORDS								
	SOURCE								
	ORGANISM								
	REFERENCE								
	AUTHORS								
	TITLE								
	JOURNAL								
FEATURES									
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/db_xref="taxon:32630"
/note="A primer"

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Qy 1329 GGTGCTCTTCTCAAGTGATTTGGGACAA 1359
Db 1 GGTGCTCTTCTCAAGTGATTTGGGACAA 31

RESULT 4
LOCUS AX057530 30 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 66 from Patent WO0077204.
ACCESSION AX057530
VERSION AX057530.1 GI:12310264

KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.

REFERENCE 1
AUTHORS Lorenz, E., Schwartz, D.A. and Schutte, B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 66 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US); Lorenz, Eva (US)
FEATURES Location/Qualifiers
source 1..30
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="A primer"

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Best Local Similarity 96.7%; Pred. No. 12;
Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1030 GATTAGCATCTTACTACTACTCTCGATG 1059
Db 1 GATTAGCATCTTACTACTACTCTCGATG 30

RESULT 5
LOCUS AX057531 27 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 67 from Patent WO0077204.
ACCESSION AX057531
VERSION AX057531.1 GI:12310265

KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
AUTHORS Lorenz, E., Schwartz, D.A. and Schutte, B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 67 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US); Lorenz, Eva (US)
FEATURES Location/Qualifiers
source 1..27
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Best Local Similarity 100.0%; Pred. No. 14;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 27 GTGGGAATGCTTTTCAGAGTTGATC 1

RESULT 6
LOCUS AX057507 26 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 43 from Patent WO0077204.
ACCESSION AX057507
VERSION AX057507.1 GI:12310241

KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
AUTHORS Lorenz, E., Schwartz, D.A. and Schutte, B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 43 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US); Lorenz, Eva (US)
FEATURES Location/Qualifiers
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/db_xref="taxon:9606"

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Best Local Similarity 100.0%; Pred. No. 16;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1117 TGACTATTGAAGGGTAAAGACTTT 1142
Db 26 TGACTATTGAAGGGTAAAGACTTT 1

RESULT 7
LOCUS CQ873743 24 bp RNA linear PAT 27-SEP-2004
DEFINITION Sequence 162 from Patent WO2004076622.
ACCESSION CQ873743
VERSION CQ873743.1 GI:52747335

KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens

ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
AUTHORS Taira, K. and Kawasaki, H.
TITLE Regulation of mammalian cells
JOURNAL Patent: WO 2004076622-A 162 10-SEP-2004;
UNIVERSITY National Institute of Advanced Industrial Science and Technology (JP)
FEATURES Location/Qualifiers
source 1..24
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/mol_type="unassigned RNA"
/db_xref="taxon:9606"

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Best Local Similarity 100.0%; Pred. No. 22;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2278 TCTGCCTTCACTACAGACTTTA 2301
Db 1 TCTGCCTTCACTACAGACTTTA 24

RESULT 8
LOCUS AX057505 24 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 41 from Patent WO0077204.
ACCESSION AX057505
VERSION AX057505.1 GI:12310239

KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens

ORGANISM Homo sapiens

Wed Feb 16 09:29:34 2005

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PR 31-MAR-2000 JP 00P 99617,22-NOV-2000 JP 00P 356719 PR
28-MAR-2001 US 09/806158
PT SHOJI FURUSAKO,SADAO MORI,KAMON SHIRAKAWA,TOMOHIRO TAKAHASHI
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A61P38/02,
PC A61P39/395,A61P43/00,G01N33/15,G01N33/50,G01N33/53,G01N33/577
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FH Key Location/Qualifiers
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FEATURES
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Best Local Similarity 100.0%; Pred. No. 22;
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QY 836 AGAAATTAGGCTTCATAAGCTGAC 859
DB 24 AGAAATTAGGCTTCATAAGCTGAC 1

RESULT 9
AX057510/c 24 bp DNA linear PAT 17-JAN-2001
LOCUS
DEFINITION Sequence 46 from Patent WO0077204.
ACCESSION AX057510
VERSION AX057510.1 GI:12310244
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
Lorenz,E., Schwartz,D.A. and Schutte,B.C.
Variant tlr4 nucleic acid and uses thereof
Patent: WO 0077204-A 46 21-DEC-2000;
University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
Location/Qualifiers
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1464 TTGAACAAATGAGTGAGTTTCA 1487
DB 24 TTGAACAAATGAGTGAGTTTCA 1

RESULT 10
BD102554/c 24 bp DNA linear PAT 27-AUG-2002
LOCUS
DEFINITION TLR/CD14 binding inhibitor.
ACCESSION BD102554
VERSION BD102554.1 GI:22648128
KEYWORDS WO 0172993-A/7.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
1 (bases 1 to 24)
Furusako,S., Mori,S., Shirakawa,K. and Takahashi,T.
TLR/CD14 binding inhibitor
Patent: WO 0172993-A 7 04-OCT-2001;
MOCHIDA PHARMACEUTICAL CO LTD,SHOJI FURUSAKO,SADAO MORI, KAMON
SHIRAKAWA, TOMOHIRO TAKAHASHI
OS Artificial Sequence
PN WO 0172993-A/7
PD 04-OCT-2001
PF 02-APR-2001 WO 2001JP002869

PR 31-MAR-2000 JP 00P 99617,22-NOV-2000 JP 00P 356719 PR
28-MAR-2001 US 09/806158
PT SHOJI FURUSAKO,SADAO MORI,KAMON SHIRAKAWA,TOMOHIRO TAKAHASHI
PC C12N15/00,C07K14/00,C07K16/28,C07K16/28,A61K45/00,A61P31/04,
A61P38/02,
PC A61P39/395,A61P43/00,G01N33/15,G01N33/50,G01N33/53,G01N33/577
CC TLR/CD14 binding inhibitor
FH Key Location/Qualifiers
FT source 1..24 /organism='Artificial Sequence'

FEATURES
source
1..24
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 22;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1137 GACTTTCTTATAATTCGGATG 1160
DB 24 GACTTTCTTATAATTCGGATG 1

RESULT 11
AX057483 23 bp DNA linear PAT 17-JAN-2001
LOCUS
DEFINITION Sequence 19 from Patent WO0077204.
ACCESSION AX057483
VERSION AX057483.1 GI:12310217
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
Lorenz,E., Schwartz,D.A. and Schutte,B.C.
Variant tlr4 nucleic acid and uses thereof
Patent: WO 0077204-A 19 21-DEC-2000;
University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
Location/Qualifiers
1..23
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 26;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 TGGGAGAAATTTAGAAATGAAGGA 965
DB 1 TGGGAGAAATTTAGAAATGAAGGA 23

RESULT 12
AX057487 23 bp DNA linear PAT 17-JAN-2001
LOCUS
DEFINITION Sequence 23 from Patent WO0077204.
ACCESSION AX057487
VERSION AX057487.1 GI:12310221
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
Lorenz,E., Schwartz,D.A. and Schutte,B.C.
Variant tlr4 nucleic acid and uses thereof
Patent: WO 0077204-A 23 21-DEC-2000;
University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
Location/Qualifiers

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source 1. .23
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 26;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1410 TCAAACTCTTGGGCTTAGAACA 1432
|||||
1 TCAAACTCTTGGGCTTAGAACA 23

Db

RESULT 13
AX057496
LOCUS 23 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 32 from Patent WO0077204.
ACCESSION AX057496
VERSION AX057496.1 GI:12310230
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
AUTHORS Lorenz, E., Schwartz, D.A. and Schutte, B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 32 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
source
Location/Qualifiers
1. .23
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 26;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2459 TATCATCTTCATCTGCTGCAGCA 2481
|||||
1 TATCATCTTCATCTGCTGCAGCA 23

Db

RESULT 14
AX057508/c
LOCUS 23 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 44 from Patent WO0077204.
ACCESSION AX057508
VERSION AX057508.1 GI:12310242
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
AUTHORS Lorenz, E., Schwartz, D.A. and Schutte, B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 44 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
source
Location/Qualifiers
1. .23
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 26;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1200 CCCACATTGAACTCAAAATCTCT 1222
|||||

Db

RESULT 17
AR184845
LOCUS 27 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 333 from patent US 6346398.
ACCESSION AR184845
VERSION AR184845.1 GI:20230810
KEYWORDS
SOURCE Unknown.

Qy 992 TCTAGAGGGCCTGTGCAATTG 1013
|||||
22 TCTAGAGGGCCTGTGCAATTG 1

Db

RESULT 16
AX057506/c
LOCUS 22 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 42 from Patent WO0077204.
ACCESSION AX057506
VERSION AX057506.1 GI:12310240
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
AUTHORS Lorenz, E., Schwartz, D.A. and Schutte, B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 42 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
source
Location/Qualifiers
1. .22
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.6%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1323 TTCAAAGGTTGCTGTCTCAAA 1344
|||||
1 TTCAAAGGTTGCTGTCTCAAA 22

Db

RESULT 15
AX057486
LOCUS 22 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 22 from Patent WO0077204.
ACCESSION AX057486
VERSION AX057486.1 GI:12310220
KEYWORDS
SOURCE
ORGANISM Homo sapiens (human)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
AUTHORS Lorenz, E., Schwartz, D.A. and Schutte, B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 22 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
source
Location/Qualifiers
1. .22
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

ORGANISM Unknown.
Unclassified.
1 (bases 1 to 27)
REFERENCE Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
AUTHORS Method and reagent for the treatment of diseases or conditions
TITLE related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6346398-A 333 12-FEB-2002;
FEATURES Location/Qualifiers
source 1..27
/organism="unknown"
/mol_type="unassigned DNA"
Query Match 0.6%; Score 21.2; DB 1; Length 27;
Best Local Similarity 85.2%; Pred. No. 51;
Matches 23; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 2673 ACATCTATCTGAGAGGAAATATAAA 2699
Db 1 ACATCTGCTGTGATGANGAAATATAAA 27
RESULT 18
LOCUS AR191031 27 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 6519 from patent US 6346398.
ACCESSION AR191031
VERSION AR191031.1 GI:20236996
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
1 (bases 1 to 27)
REFERENCE Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
AUTHORS Method and reagent for the treatment of diseases or conditions
TITLE related to levels of vascular endothelial growth factor receptor
JOURNAL Patent: US 6346398-A 6519 12-FEB-2002;
FEATURES Location/Qualifiers
source 1..27
/organism="unknown"
/mol_type="unassigned DNA"
Query Match 0.6%; Score 21.2; DB 1; Length 27;
Best Local Similarity 85.2%; Pred. No. 51;
Matches 23; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 2673 ACATCTATCTGAGAGGAAATATAAA 2699
Db 1 ACATCTGCTGTGATGANGAAACATATAA 27
RESULT 19
LOCUS AX057484 21 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 20 from Patent WO0077204.
ACCESSION AX057484
VERSION AX057484.1 GI:12310218
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE Lorenz,E., Schwartz,D.A. and Schutte,B.C.
AUTHORS Variant t1r4 nucleic acid and uses thereof
TITLE Patent: WO 0077204-A 20 21-DEC-2000;
JOURNAL University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES Location/Qualifiers
source 1..21
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 34;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1093 TTTCCTTCATTTCCCTGGTGA 1113
Db 1 TTTCCTTCATTTCCCTGGTGA 21
RESULT 20
LOCUS AX057503 21 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 39 from Patent WO0077204.
ACCESSION AX057503
VERSION AX057503.1 GI:12310237
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE Lorenz,E., Schwartz,D.A. and Schutte,B.C.
AUTHORS Variant t1r4 nucleic acid and uses thereof
TITLE Patent: WO 0077204-A 39 21-DEC-2000;
JOURNAL University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES Location/Qualifiers
source 1..21
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 524 AGCCTTTTCTGGACTATCAAG 544
Db 21 AGCCTTTTCTGGACTATCAAG 1
RESULT 21
LOCUS AX057523 21 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 59 from Patent WO0077204.
ACCESSION AX057523
VERSION AX057523.1 GI:12310257
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE Lorenz,E., Schwartz,D.A. and Schutte,B.C.
AUTHORS Variant t1r4 nucleic acid and uses thereof
TITLE Patent: WO 0077204-A 59 21-DEC-2000;
JOURNAL University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES Location/Qualifiers
source 1..21
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 34;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2813 AGATATGCGAGGCTGCTAATC 2833
Db 21 AGATATGCGAGGCTGCTAATC 1
RESULT 22
LOCUS AX057472 20 bp DNA linear PAT 17-JAN-2001


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QY 557 GGTGGCTGTGGAGACAAATC 576
Db 1 GGTGGCTGTGGAGACAAATC 20

RESULT 27
AX057481
LOCUS AX057481 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 17 from Patent WO0077204.
ACCESSION AX057481
VERSION AX057481.1 GI:12310215
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
TITLE Lorenz, E., Schwartz, D.A. and Schutte, B.C.
JOURNAL Variant tlr4 nucleic acid and uses thereof
PATENT: WO 0077204-A 17 21-DEC-2000;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Lorenz, Eva (US)
FEATURES
source
1..20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1541 CAGAGTTGCTTTCAATGGCA 1560
Db 1 CAGAGTTGCTTTCAATGGCA 20

RESULT 30
AX057489
LOCUS AX057489 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 25 from Patent WO0077204.
ACCESSION AX057489
VERSION AX057489.1 GI:12310223
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
TITLE Lorenz, E., Schwartz, D.A. and Schutte, B.C.
JOURNAL Variant tlr4 nucleic acid and uses thereof
PATENT: WO 0077204-A 25 21-DEC-2000;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Lorenz, Eva (US)
FEATURES
source
1..20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1612 TCCAGGAAAACCTTCCTTCCA 1631
Db 1 TCCAGGAAAACCTTCCTTCCA 20

RESULT 31
AX057491
LOCUS AX057491 20 bp DNA linear PAT 18-JAN-2001
DEFINITION Sequence 27 from Patent WO0077204.
ACCESSION AX057491
VERSION AX057491.1 GI:12310225
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
TITLE Lorenz, E., Schwartz, D.A. and Schutte, B.C.
JOURNAL Variant tlr4 nucleic acid and uses thereof
PATENT: WO 0077204-A 27 21-DEC-2000;
UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; Lorenz, Eva (US)
FEATURES
source
1..20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1190 TGGACAGTTTCCACATTGA 1209
Db 1 TGGACAGTTTCCACATTGA 20

RESULT 29
AX057488
LOCUS AX057488 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 24 from Patent WO0077204.
ACCESSION AX057488

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FEATURES
  source
    Location/Qualifiers
      1..20
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1924 ACCAGAGTTCTCTGCAATGG 1943
Db 1 ACCAGAGTTCTCTGCAATGG 20

RESULT 32
LOCUS AX057492 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 28 from Patent WO0077204.
ACCESSION AX057492
VERSION AX057492.1 GI:12310226
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1 Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE Variant tlr4 nucleic acid and uses thereof
  JOURNAL Patent: WO 0077204-A 28 21-DEC-2000;
  UNIVERSITY of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
  source
    Location/Qualifiers
      1..20
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2017 TGCCTGTGCTGAGTTGAAT 2036
Db 1 TGCCTGTGCTGAGTTGAAT 20

RESULT 33
LOCUS AX057493 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 29 from Patent WO0077204.
ACCESSION AX057493
VERSION AX057493.1 GI:12310227
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1 Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE Variant tlr4 nucleic acid and uses thereof
  JOURNAL Patent: WO 0077204-A 29 21-DEC-2000;
  UNIVERSITY of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
  source
    Location/Qualifiers
      1..20
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2074 CGGTCCTCAGTGTGCTTGTA 2093
Db 1 CGGTCCTCAGTGTGCTTGTA 20
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Db 1 CGGTCCTCAGTGTGCTTGTA 20

RESULT 34
LOCUS AX057494 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 30 from Patent WO0077204.
ACCESSION AX057494
VERSION AX057494.1 GI:12310228
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1 Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE Variant tlr4 nucleic acid and uses thereof
  JOURNAL Patent: WO 0077204-A 30 21-DEC-2000;
  UNIVERSITY of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
  source
    Location/Qualifiers
      1..20
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2210 CCAGGATGAGGACTGGGTAA 2229
Db 1 CCAGGATGAGGACTGGGTAA 20

RESULT 35
LOCUS AX057495 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 31 from Patent WO0077204.
ACCESSION AX057495
VERSION AX057495.1 GI:12310229
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1 Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  TITLE Variant tlr4 nucleic acid and uses thereof
  JOURNAL Patent: WO 0077204-A 31 21-DEC-2000;
  UNIVERSITY of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
  source
    Location/Qualifiers
      1..20
      /organism="Homo sapiens"
      /mol_type="unassigned DNA"
      /db_xref="taxon:9606"

Query Match
  Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2351 AAGCCGAAGGTGATTGTG 2370
Db 1 AAGCCGAAGGTGATTGTG 20

RESULT 36
LOCUS AX057497 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 33 from Patent WO0077204.
ACCESSION AX057497
VERSION AX057497.1 GI:12310231
KEYWORDS
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SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 007204-A 33 21-DEC-2000;
          University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
source
          1..20
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2467 TCATTGCTCTCGAGAGGTG 2486
Db 1 TCATTGCTCTCGAGAGGTG 20
          1..20
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"
RESULT 37
AX057498 Homo sapiens (human)
LOCUS AX057498 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 34 from Patent WO007204.
ACCESSION AX057498
VERSION AX057498.1 GI:12310232
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 007204-A 34 21-DEC-2000;
          University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
source
          1..20
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2590 GAGGACTCAGAAAAGCCCTG 2609
Db 1 GAGGACTCAGAAAAGCCCTG 20
          1..20
          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"
RESULT 38
AX057499 Homo sapiens (human)
LOCUS AX057499 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 35 from Patent WO007204.
ACCESSION AX057499
VERSION AX057499.1 GI:12310233
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 007204-A 35 21-DEC-2000;
          University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
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Best Local Similarity 100.0%; Pred. No. 40;
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Db 1 AATTGGCAGGAGCAACATC 20
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Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 733 TTTATTGCACAGACTTGCGG 752
Db 20 TTTATTGCACAGACTTGCGG 1
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          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"
RESULT 40
AX057509 Homo sapiens (human)
LOCUS AX057509 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 45 from Patent WO007204.
ACCESSION AX057509
VERSION AX057509.1 GI:12310243
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
          Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 007204-A 45 21-DEC-2000;
          University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
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          /mol_type="unassigned DNA"
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Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 20 TTGGGCAACACGCTTAAG 1
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          /mol_type="unassigned DNA"
          /db_xref="taxon:9606"
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1351 TTGGGCAACACGCTTAAG 1370
Db 20 TTGGGCAACACGCTTAAG 1
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          /organism="Homo sapiens"
          /mol_type="unassigned DNA"
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.					
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REFERENCE	AUTHORS	Lorenz,E., Schwartz,D.A. and Schutte,B.C.			
TITLE	VARIANT	t1r4 nucleic acid and uses thereof			
JOURNAL	PATENT:	WO 0077204-A 49 21-DEC-2000;			
FEATURES	UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; LORENZ, EVA (US)				
SOURCE	LOCATION/QUALIFIERS				
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	/mol_type="unassigned DNA"				
	/db_xref="taxon:9606"				
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Matches	20; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
QY	1788 TGTCTGAACCTCCCTCCAGGT	1807			
Db	20 TGTCTGAACCTCCCTCCAGGT	1			
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RESULT 44	AX057514/c				
LOCUS	Sequence 50 from Patent WO0077204.	20 bp	DNA	linear	PAT 17-JAN-2001
DEFINITION	AX057514				
ACCESSION	AX057514				
VERSION	AX057514.1 GI:12310248				
KEYWORDS	Homo sapiens (human)				
SOURCE	Homo sapiens				
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
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REFERENCE	AUTHORS	Lorenz,E., Schwartz,D.A. and Schutte,B.C.			
TITLE	VARIANT	t1r4 nucleic acid and uses thereof			
JOURNAL	PATENT:	WO 0077204-A 50 21-DEC-2000;			
FEATURES	UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; LORENZ, EVA (US)				
SOURCE	LOCATION/QUALIFIERS				
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	/mol_type="unassigned DNA"				
	/db_xref="taxon:9606"				
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Matches	20; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
QY	1568 TGCGTTGTCAGTCTCGAAG	1587			
Db	20 TGCGTTGTCAGTCTCGAAG	1			
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RESULT 42	AX057512/c				
LOCUS	Sequence 48 from Patent WO0077204.	20 bp	DNA	linear	PAT 17-JAN-2001
DEFINITION	AX057512				
ACCESSION	AX057512				
VERSION	AX057512.1 GI:12310246				
KEYWORDS	Homo sapiens (human)				
SOURCE	Homo sapiens				
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
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REFERENCE	AUTHORS	Lorenz,E., Schwartz,D.A. and Schutte,B.C.			
TITLE	VARIANT	t1r4 nucleic acid and uses thereof			
JOURNAL	PATENT:	WO 0077204-A 48 21-DEC-2000;			
FEATURES	UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; LORENZ, EVA (US)				
SOURCE	LOCATION/QUALIFIERS				
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	/mol_type="unassigned DNA"				
	/db_xref="taxon:9606"				
Query Match	Best Local Similarity	0.5%; Score 20; DB 1; Length 20;			
Matches	20; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
QY	1656 TTGACCTTCCTGGACTCTC	1675			
Db	20 TTGACCTTCCTGGACTCTC	1			
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RESULT 43	AX057513/c				
LOCUS	Sequence 49 from Patent WO0077204.	20 bp	DNA	linear	PAT 17-JAN-2001
DEFINITION	AX057513				
ACCESSION	AX057513				
VERSION	AX057513.1 GI:12310247				
KEYWORDS	Homo sapiens (human)				
SOURCE	Homo sapiens				
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
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REFERENCE	AUTHORS	Lorenz,E., Schwartz,D.A. and Schutte,B.C.			
TITLE	VARIANT	t1r4 nucleic acid and uses thereof			
JOURNAL	PATENT:	WO 0077204-A 51 21-DEC-2000;			
FEATURES	UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; LORENZ, EVA (US)				
SOURCE	LOCATION/QUALIFIERS				
	1..20				
	/organism="Homo sapiens"				
	/mol_type="unassigned DNA"				
	/db_xref="taxon:9606"				
Query Match	Best Local Similarity	0.5%; Score 20; DB 1; Length 20;			
Matches	20; Conservative	0; Mismatches	0; Indels	0; Gaps	0;
QY	1656 TTGACCTTCCTGGACTCTC	1675			
Db	20 TTGACCTTCCTGGACTCTC	1			
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RESULT 43	AX057513/c				
LOCUS	Sequence 49 from Patent WO0077204.	20 bp	DNA	linear	PAT 17-JAN-2001
DEFINITION	AX057513				
ACCESSION	AX057513				
VERSION	AX057513.1 GI:12310247				
KEYWORDS	Homo sapiens (human)				
SOURCE	Homo sapiens				

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.					
1					
REFERENCE	AUTHORS	Lorenz,E., Schwartz,D.A. and Schutte,B.C.			
TITLE	VARIANT	t1r4 nucleic acid and uses thereof			
JOURNAL	PATENT:	WO 0077204-A 49 21-DEC-2000;			
FEATURES	UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; LORENZ, EVA (US)				
SOURCE	LOCATION/QUALIFIERS				
	1..20				
	/organism="Homo sapiens"				
	/mol_type="unassigned DNA"				
	/db_xref="taxon:9606"				
Query Match	Score 20; DB 1; Length 20;				
Best Local Similarity	100.0%; Pred. No. 40;				
Matches	Conservative 0; Mismatches 0; Indels 0; Gaps 0;				
QY	1788 TGTCTGAACCTCCCTCCAGGT 1807				
Db	20 TGTCTGAACCTCCCTCCAGGT 1				
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RESULT 44	AX057514/c				
LOCUS	Sequence 50 from Patent WO0077204.				
DEFINITION	AX057514				
ACCESSION	AX057514				
VERSION	AX057514.1 GI:12310248				
KEYWORDS	Homo sapiens (human)				
SOURCE	Homo sapiens				
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
REFERENCE	1				
AUTHORS	Lorenz,E., Schwartz,D.A. and Schutte,B.C.				
TITLE	VARIANT t1r4 nucleic acid and uses thereof				
JOURNAL	PATENT: WO 0077204-A 50 21-DEC-2000;				
FEATURES	UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; LORENZ, EVA (US)				
SOURCE	LOCATION/QUALIFIERS				
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	/mol_type="unassigned DNA"				
	/db_xref="taxon:9606"				
Query Match	Score 20; DB 1; Length 20;				
Best Local Similarity	100.0%; Pred. No. 40;				
Matches	Conservative 0; Mismatches 0; Indels 0; Gaps 0;				
QY	1568 TGCGTTGTCAGTCTCGAAG 1587				
Db	20 TGCGTTGTCAGTCTCGAAG 1				
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RESULT 42	AX057512/c				
LOCUS	Sequence 48 from Patent WO0077204.				
DEFINITION	AX057512				
ACCESSION	AX057512				
VERSION	AX057512.1 GI:12310246				
KEYWORDS	Homo sapiens (human)				
SOURCE	Homo sapiens				
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
REFERENCE	1				
AUTHORS	Lorenz,E., Schwartz,D.A. and Schutte,B.C.				
TITLE	VARIANT t1r4 nucleic acid and uses thereof				
JOURNAL	PATENT: WO 0077204-A 48 21-DEC-2000;				
FEATURES	UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; LORENZ, EVA (US)				
SOURCE	LOCATION/QUALIFIERS				
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	/db_xref="taxon:9606"				
Query Match	Score 20; DB 1; Length 20;				
Best Local Similarity	100.0%; Pred. No. 40;				
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QY	1656 TTGACCTTCCTGGACTCTC 1675				
Db	20 TTGACCTTCCTGGACTCTC 1				
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RESULT 43	AX057513/c				
LOCUS	Sequence 49 from Patent WO0077204.				
DEFINITION	AX057513				
ACCESSION	AX057513				
VERSION	AX057513.1 GI:12310247				
KEYWORDS	Homo sapiens (human)				
SOURCE	Homo sapiens				
ORGANISM	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.				
REFERENCE	1				
AUTHORS	Lorenz,E., Schwartz,D.A. and Schutte,B.C.				
TITLE	VARIANT t1r4 nucleic acid and uses thereof				
JOURNAL	PATENT: WO 0077204-A 51 21-DEC-2000;				
FEATURES	UNIVERSITY OF IOWA RESEARCH FOUNDATION (US) ; LORENZ, EVA (US)				
SOURCE	LOCATION/QUALIFIERS				
	1..20				
	/organism="Homo sapiens"				
	/mol_type="unassigned DNA"				
	/db_xref="taxon:9606"				
Query Match	Score 20; DB 1; Length 20;				
Best Local Similarity	100.0%; Pred. No. 40;				
Matches	Conservative 0; Mismatches 0; Indels 0; Gaps 0;				
QY	1656 TTGACCTTCCTGGACTCTC 1675				
Db	20 TTGACCTTCCTGGACTCTC 1				
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RESULT 43	AX057513/c				
LOCUS	Sequence 49 from Patent WO0077204.				
DEFINITION	AX057513				
ACCESSION	AX057513				
VERSION					

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REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 56 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
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/organism="Homo sapiens"
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/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2659 ATTGGCAGGAGCAACATCT 2678
Db 20 ATTGGCAGGAGCAACATCT 1

RESULT 51
AX057521/c
LOCUS AX057521 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 57 from Patent WO0077204.
ACCESSION AX057521
VERSION AX057521.1 GI:12310255
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 57 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
source
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2590 GACGACTCAGAAAGCCCTG 2609
Db 20 GACGACTCAGAAAGCCCTG 1

RESULT 52
AX057522/c
LOCUS AX057522 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 58 from Patent WO0077204.
ACCESSION AX057522
VERSION AX057522.1 GI:12310256
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 58 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
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source
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/organism="Homo sapiens"
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Query Match
Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2725 CTGGGTCCACACTGTGTCA 2744
Db 20 CTGGGTCCACACTGTGTCA 1

RESULT 53
AX057524
LOCUS AX057524 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 60 from Patent WO0077204.
ACCESSION AX057524
VERSION AX057524.1 GI:12310258
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 60 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
source
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 15 GCTCACAGAGCAGTGAGGA 34
Db 1 GCTCACAGAGCAGTGAGGA 20

RESULT 54
AX057525/c
LOCUS AX057525 20 bp DNA linear PAT 17-JAN-2001
DEFINITION Sequence 61 from Patent WO0077204.
ACCESSION AX057525
VERSION AX057525.1 GI:12310259
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS Lorenz,E., Schwartz,D.A. and Schutte,B.C.
TITLE Variant tlr4 nucleic acid and uses thereof
JOURNAL Patent: WO 0077204-A 61 21-DEC-2000;
UNIVERSITY University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match
Best Local Similarity 0.5%; Score 20; DB 1; Length 20;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 448 ATGGGGCATATCAGAGCCTA 467
Db 20 ATGGGGCATATCAGAGCCTA 1

RESULT 55
AX752002
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LOCUS       AX752002               20 bp      DNA          linear      PAT 20-JUN-2003
DEFINITION   Sequence 3 from Patent WO03035110.
ACCESSION   AX752002
VERSION     AX752002.1   GI:32134125
KEYWORDS    .
SOURCE      synthetic construct
            other sequences; artificial sequences.
ORGANISM    Homo sapiens (human)
REFERENCE   1
  AUTHORS   Arditi,M., Rajavashisth,T. and Shah,P.K.
  TITLE     Treating vascular disease by inhibiting Toll-like receptor-4
  JOURNAL   Patent: WO 03035110-A 3 01-MAY-2003;
            CEDARS-SINAI MEDICAL CENTER (US)
FEATURES    Location/Qualifiers
             1..20
             /organism="synthetic construct"
             /mol_type="unassigned DNA"
             /db_xref="taxon:32630"
             /note="Primer"
Query Match      0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1768 TGGATACGTTTCCTTATAAG 1787
      |||||
Db 1 TGGATACGTTTCCTTATAAG 20

RESULT 56
BD102553
LOCUS       BD102553               20 bp      DNA          linear      PAT 27-AUG-2002
DEFINITION   TLR/CD14 binding inhibitor.
ACCESSION   BD102553
VERSION     BD102553.1   GI:22648127
KEYWORDS    WO 0172993-A/6.
SOURCE      synthetic construct
            other sequences; artificial sequences.
ORGANISM    Furusako,S., Mori,S., Shirakawa,K. and Takahashi,T.
REFERENCE   1 (bases 1 to 20)
  AUTHORS   Furusako,S., Mori,S., Shirakawa,K. and Takahashi,T.
  TITLE     TLR/CD14 binding inhibitor
  JOURNAL   Patent: WO 0172993-A 6 04-OCT-2001;
            MOCHIDA PHARMACEUTICAL CO LTD, SHOJI FURUSAKO, SADAOKA MORI, KAMON
            SHIRAKAWA, TOMOHIRO TAKAHASHI
            OS Artificial Sequence
            PN WO 0172993-A/6
            PD 04-OCT-2001
            PP 02-APR-2001 WO 2001JP002869
            PR 31-MAR-2000 JP 00P 99617, 22-NOV-2000 JP 00P 356719 PR
            28-MAR-2001 US 09/806158
            PI SHOJI FURUSAKO, SADAOKA MORI, KAMON SHIRAKAWA, TOMOHIRO TAKAHASHI
            PC C12N15/00, C07K14/705, C07K16/28, A61K45/00, A61P31/04,
            PC A61P38/02,
            PC A61P39/395, A61P43/00, G01N33/15, G01N33/50, G01N33/53, G01N33/577
            CC TLR/CD14 binding inhibitor
            FH Key
            FT source
            1..20
            Location/Qualifiers
            /organism="Artificial Sequence".
FEATURES    Location/Qualifiers
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             /organism="synthetic construct"
             /mol_type="genomic DNA"
             /db_xref="taxon:32630"
Query Match      0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 40;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 501 CCCATCCAGAGTTAGCCCT 520
      |||||
Db 1 CCCATCCAGAGTTAGCCCT 20

LOCUS       AX057482               19 bp      DNA          linear      PAT 17-JAN-2001
DEFINITION   Sequence 18 from Patent WO0077204.
ACCESSION   AX057482
VERSION     AX057482.1   GI:12310216
KEYWORDS    .
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   1
  AUTHORS   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  TITLE     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
  JOURNAL   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  JOURNAL   variant t1r4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 18 21-DEC-2000;
  JOURNAL   University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES    Location/Qualifiers
             1..19
             /organism="Homo sapiens"
             /mol_type="unassigned DNA"
             /db_xref="taxon:9606"
Query Match      0.5%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 812 CTTTATCCAACACGAGTGCA 830
      |||||
Db 1 CTTTATCCAACACGAGTGCA 19

RESULT 58
AX752003/c
LOCUS       AX752003               19 bp      DNA          linear      PAT 20-JUN-2003
DEFINITION   Sequence 4 from Patent WO03035110.
ACCESSION   AX752003
VERSION     AX752003.1   GI:32134125
KEYWORDS    .
SOURCE      synthetic construct
            other sequences; artificial sequences.
ORGANISM    Arditi,M., Rajavashisth,T. and Shah,P.K.
REFERENCE   1
  AUTHORS   Arditi,M., Rajavashisth,T. and Shah,P.K.
  TITLE     Treating vascular disease by inhibiting Toll-like receptor-4
  JOURNAL   Patent: WO 03035110-A 4 01-MAY-2003;
            CEDARS-SINAI MEDICAL CENTER (US)
FEATURES    Location/Qualifiers
             1..19
             /organism="synthetic construct"
             /mol_type="unassigned DNA"
             /db_xref="taxon:32630"
             /note="Primer"
Query Match      0.5%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2256 GAAGGGGTGCTCCATTTC 2274
      |||||
Db 19 GAAGGGGTGCTCCATTTC 1

RESULT 59
AX057490
LOCUS       AX057490               18 bp      DNA          linear      PAT 17-JAN-2001
DEFINITION   Sequence 26 from Patent WO0077204.
ACCESSION   AX057490
VERSION     AX057490.1   GI:12310224
KEYWORDS    .
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   1
  AUTHORS   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  TITLE     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
  JOURNAL   Lorenz,E., Schwartz,D.A. and Schutte,B.C.
  JOURNAL   variant t1r4 nucleic acid and uses thereof
  JOURNAL   Patent: WO 0077204-A 18 21-DEC-2000;
  JOURNAL   University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
FEATURES    Location/Qualifiers
             1..18
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             /mol_type="unassigned DNA"
             /db_xref="taxon:9606"
Query Match      0.5%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 45;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2256 GAAGGGGTGCTCCATTTC 2274
      |||||
Db 19 GAAGGGGTGCTCCATTTC 1

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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
REFERENCE 1
AUTHORS Lorenz, E., Schwartz, D.A. and Schurte, B.C.
TITLE Variant tir4 nucleic acid and uses thereof
JOURNAL Patent: WO 007204-A 26 21-DEC-2000;
FEATURES University of Iowa Research Foundation (US) ; Lorenz, Eva (US)
source Location/Qualifiers
1..18
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.5%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 51;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1763 TTCATTGGATACGTTTCC 1780
|||||
Db 1 TTCATTGGATACGTTTCC 18

RESULT 60
BD161176/c
LOCUS BD161176 22 bp DNA linear PAT 17-JAN-2003
DEFINITION Protein participating in mechanism for preventing infection and
ACCESSION gene encoding the protein.
VERSION BD161176.1 GI:27866934
KEYWORDS JP 2002176986-A/14.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 22)
AUTHORS Yoshikai, Y., Matsuguchi, T. and Iwami, K.
TITLE Protein participating in mechanism for preventing infection and
JOURNAL gene encoding the protein
COMMENT Patent: JP 2002176986-A 14 25-JUN-2002;
NAGOYA INDUSTRIAL SCIENCE RESEARCH INSTITUTE
OS Artificial Sequence
PN JP 2002176986-A/14
PD 25-JUN-2002
PF 14-DEC-2000 JP 2003080561
PI YASUNOBU YOSHIKAI, TETSUYA MATSUGUCHI, KENICHIRO IWAMI PC
C12N15/09, C07K14/705, C12N1/15, C12N1/19, C12N1/21, C12N5/10// PC
C12P21/02.
PC (C12N5/10, C12R1:91), C12N15/00, C12N5/00, (C12N5/00, C12R1:91) CC
Description of Artificial Sequence: PCR primer FH Key
Location/Qualifiers 1..22
FT source /organism='Artificial Sequence'.
FT Location/Qualifiers
1..22
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

FEATURES source
Query Match 0.5%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 84;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2225 GGTAGGAATGAGCTAGTAAAG 2246
|||||
Db 22 GGTGAGAAATGAGCTGTAAAG 1

RESULT 61
AR085547/c
LOCUS AR085547 20 bp DNA linear PAT 01-SEP-2000
DEFINITION Sequence 25 from patent US 5981731.
ACCESSION AR085547
VERSION AR085547.1 GI:10012314
KEYWORDS Unknown.
SOURCE

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1
REFERENCE 1
AUTHORS Monia, B.P.
TITLE Antisense oligonucleotide modulation of B-raf gene expression
JOURNAL Patent: US 5981731-A 25 09-NOV-1999;
FEATURES Location/Qualifiers
1..20
source /organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 76;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1465 TGAACAATGAGTGAG 1481
|||||
Db 20 TGAACAATGAGTGAG 4

RESULT 62
AR216067/c
LOCUS AR216067 20 bp DNA linear PAT 25-SEP-2002
DEFINITION Sequence 114 from patent US 6410518.
ACCESSION AR216067
VERSION AR216067.1 GI:23314355
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Monia, B.P.
TITLE Antisense oligonucleotide inhibition of raf gene expression
JOURNAL Patent: US 6410518-A 114 25-JUN-2002;
FEATURES Location/Qualifiers
1..20
source /organism="unknown"
/mol_type="genomic DNA"

Query Match 0.4%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 76;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1465 TGAACAATGAGTGAG 1481
|||||
Db 20 TGAACAATGAGTGAG 4

RESULT 63
AR089460/c
LOCUS AR089460 20 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 219 from patent US 5994066.
ACCESSION AR089460
VERSION AR089460.1 GI:10016217
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Bergeron, M.G., Picard, F.J., Quellet, M. and Roy, P.H.
TITLE Species-specific and universal DNA probes and amplification primers to rapidly detect and identify common bacterial pathogens and associated antibiotic resistance genes from clinical specimens for routine diagnosis in microbiology laboratories
JOURNAL Patent: US 5994066-A 219 30-NOV-1999;
FEATURES Location/Qualifiers
1..20
source /organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 2378 CCAGCACTTCATCCAGGCC 2397
Db 20 CCAGCACTTCATCAAGATC 1
/db_xref="taxon:32644"

Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 86;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

RESULT 64
BD022993/c
LOCUS BD022993 20 bp DNA linear PAT 27-AUG-2002
DEFINITION Species-specific, genus-specific and universal probes and primers
for quickly detecting and identifying common bacterial and fungal
pathogens and relating antibiotic tolerance genes from clinical
specimens for diagnosis in microbiological laboratory.
ACCESSION BD022993
VERSION BD022993.1 GI:22564216
KEYWORDS JP 2001504330-A/61.
SOURCE Streptococcus salivarius
ORGANISM Streptococcus salivarius
Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
Streptococcus.
REFERENCE 1 (bases 1 to 20)
AUTHORS Bergeron,M.J., Picard,F.G., Weretto,M. and Roy,P.H.
TITLE Species-specific, genus-specific and universal probes and primers
for quickly detecting and identifying common bacterial and fungal
pathogens and relating antibiotic tolerance genes from clinical
specimens for diagnosis in microbiological laboratory
JOURNAL Patent: JP 2001504330-A 61 03-APR-2001;
COMMENT INFECTIO DIAGNOSTICS INC
PN JP 2001504330-A/61
PD 03-APR-2001
PR 04-NOV-1997 JP 1998520907
PR 04-NOV-1996 US 08/743637
PI MICHEL JU BERGERON,FRANCOIS G PICARD,MARC WERETTO,PAUL H ROY
PC C12N15/09,C12N1/21,C12Q1/68// (C12Q1/68,C12R1:01), (C12Q1/68, PC
C12R1:46),
PC (C12Q1/68,C12R1:44), (C12Q1/68,C12R1:72),C12N15/00 CC
Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers.
FEATURES
source 1..20
/organism="Streptococcus salivarius"
/mol_type="genomic DNA"
/db_xref="taxon:1304"

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2378 CCAGCACTTCATCCAGGCC 2397
Db 20 CCAGCACTTCATCAAGATC 1

RESULT 65
A83595
LOCUS A83595 20 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 24 from Patent WO9849324.
ACCESSION A83595
VERSION A83595.1 GI:6732851
KEYWORDS unidentified
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 20)
AUTHORS Matthijs,G.
TITLE CARBOHYDRATE-DEFICIENT GLYCOPROTEIN SYNDROME TYPE I
JOURNAL Patent: WO 9849324-A 24 05-NOV-1998;
MATTHIJS GERT (BE); GENZYME LTD (GB)
FEATURES
source 1..20
/organism="unidentified"
/mol_type="unassigned DNA"

QY 2683 GAAGAGGAGGAAAAATAAAACCT 2703
Db 21 GATGATGACAAATAAAACCT 1

Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

RESULT 68
AR137361/c
LOCUS AR137361 21 bp DNA linear PAT 16-JUN-2001
DEFINITION Sequence 108 from patent US 6197505.
ACCESSION AR137361
VERSION AR137361.1 GI:14478870

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KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE Unclassified.
1 (bases 1 to 21)
AUTHORS Norberg,L.Torbjorn., Andersson,M.Kristina. and Lindstrom,P.Harry.Rutger.
TITLE Methods for assessing cardiovascular status and compositions for use thereof
JOURNAL Patent: US 6197505-A 108 06-MAR-2001; Location/Qualifiers
FEATURES
source
1..21
/organism="unknown"
/mol_type="unassigned DNA"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred.No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 27 AGTGAGGATGATGCCAGGATG 47
Db 21 AGTGAGGTTGATGCCAGGAAG 1
RESULT 69
BD231344/c
LOCUS BD231344.1 GI:33041114
DEFINITION Genes for assessing cardiovascular status and compositions for use thereof.
ACCESSION BD231344
VERSION JP 2002527079-A/108.
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 21)
AUTHORS Norberg,L.T., Andersson,M.K., Lindstrom,P.H.R. and Jonsson,L.
TITLE Genes for assessing cardiovascular status and compositions for use thereof
JOURNAL Patent: JP 2002527079-A 108 27-AUG-2002; PAOSEAKENSINGU AB
COMMENT OS Artificial Sequence
PN JP 2002527079-A/108
PD 27-AUG-2002
PF 13-OCT-1999 JP 2000576056
PR 14-OCT-1998 US 60/104286,14-OCT-1998 US 60/104302 PI LEIF TORBJORN NORBERG,MARIA KRISTINA ANDERSSON,PER HARRY RUTGER LINDSTROM, PI LENA JONSSON
PC C12Q1/68,C12N15/09,G01N33/53,G01N33/566,C12N15/00 CC Genes for assessing cardiovascular status and compositions for use thereof
CC use thereof
FT Key Location/Qualifiers
FT source 1..21
FT /organism='Artificial Sequence'.
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source
1..21
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred.No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 27 AGTGAGGATGATGCCAGGATG 47
Db 21 AGTGAGGTTGATGCCAGGAAG 1
RESULT 70
CQ787005/c
LOCUS CQ787005.1 GI:45721988
DEFINITION Sequence 11 from Patent WO2004020661.
ACCESSION CQ787005
VERSION CQ787005.1
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Sendtner,M. and Boenmel,H.
TITLE Test system for the discovery of active agents in nerve cell diseases
JOURNAL Patent: WO 2004020661-A 11 11-MAR-2004; Medlnnova Gesellschaft fuer Medizinische Innovation en aus Akademischer Forschung mbH (DE)
FEATURES
source
1..21
Location/Qualifiers
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Primer"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred.No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 342 GACCTGAGCTTTAATCCCTG 362
Db 21 GACCTGAGTTTGAATCCCGAG 1
RESULT 71
E35929/c
LOCUS E35929.1 GI:18624640
DEFINITION Method for detecting Kawasaki disease factor.
ACCESSION E35929
VERSION JP 2000157297-A/20.
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 21)
AUTHORS Yoshioka,T. and Suzuki,R.
TITLE Method for detecting Kawasaki disease factor
JOURNAL Patent: JP 2000157297-A 20 13-JUN-2000; SHIONOGI & CO LTD
COMMENT OS Artificial Sequence
PN JP 2000157297-A/20
PD 13-JUN-2000
PR 01-DEC-1998 JP 1998341661
PI TAKESHI YOSHIOKA,RYUJI SUZUKI
PC C12Q1/68,C12N15/09,G01N33/48,C12N15/00 CC
FT Key Location/Qualifiers
FT source 1..21
FT /organism='Artificial Sequence'.
FEATURES
source
1..21
Location/Qualifiers
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred.No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 409 TGCTGGATTTATCCAGGTGTG 429
Db 21 TGCTGGATTTATCCAGCTGTG 1
RESULT 72
CQ787005/c
LOCUS CQ787005.1 GI:45721988
DEFINITION Sequence 11 from Patent WO2004020661.
ACCESSION CQ787005
VERSION CQ787005.1
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Sendtner,M. and Boenmel,H.
TITLE Test system for the discovery of active agents in nerve cell diseases
JOURNAL Patent: WO 2004020661-A 11 11-MAR-2004; Medlnnova Gesellschaft fuer Medizinische Innovation en aus Akademischer Forschung mbH (DE)
FEATURES
source
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Location/Qualifiers
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Primer"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred.No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 409 TGCTGGATTTATCCAGGTGTG 429
Db 21 TGCTGGATTTATCCAGCTGTG 1
RESULT 72

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AR233713
LOCUS AR233713 21 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 75 from patent US 6458536.
ACCESSION AR233713
VERSION AR233713.1 GI:27276337
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
AUTHORS Gatti,R.A.
TITLE Modified SSCP method using sequential electrophoresis of multiple nucleic acid segments
JOURNAL Patent: US 6458536-A 75 01-OCT-2002;
FEATURES
source
1. .21
/organism="unknown"
/mol_type="genomic DNA"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1842 AAAAAACAGCACTACAGCAT 1862
|||||
DB 1 AAAAAACAGCAAGACAGCAT 21
RESULT 73
AR367361/c
LOCUS AR367361 21 bp DNA linear PAT 12-SEP-2003
DEFINITION Sequence 87 from patent US 6329507.
ACCESSION AR367361
VERSION AR367361.1 GI:34600438
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
AUTHORS Mezes,P.S., Richard,R.A., Affholter,J.A. and Kotite,N.J.
TITLE Dimer and multimer forms of single chain polypeptides
JOURNAL Patent: US 6329507-A 87 11-DEC-2001;
FEATURES
source
1. .21
/organism="unknown"
/mol_type="genomic DNA"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2683 GAAGAGGAAATATAAACCT 2703
|||||
DB 21 GATGATGACAAATAAACCT 1
RESULT 74
AX037483/c
LOCUS AX037483 21 bp DNA linear PAT 16-NOV-2000
DEFINITION Sequence 108 from Patent WO0056922.
ACCESSION AX037483
VERSION AX037483.1 GI:11226910
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE
AUTHORS Norberg,L.T., Olaisson,E., Jonsson,L., Lindstrom,P.H. and Sanders,R.
TITLE Genetic polymorphism and polymorphic pattern for assessing disease status, and compositions for use thereof
JOURNAL Patent: WO 0056922-A 108 28-SEP-2000;
NORBERG LEIF TORBJORN (SE) ; OLAISSON ERIK (SE) ; JONSSON LENA (SE)

; GEMINI GENOMICS AB (SE) ; LINDSTROM PER HARRY RUTGER (SE) ;
SANDERS RHANNON (SE)
FEATURES
source
1. .21
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Oligonucleotide primer"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 27 AGTGAGGATGATGCCAGGATG 47
|||||
DB 21 AGTGAGGTTGATGCCAGAAAG 1
RESULT 75
BD075235/c
LOCUS BD075235 21 bp DNA linear PAT 27-AUG-2002
DEFINITION Methods for assessing cardiovascular status and compositions for use thereof.
ACCESSION BD075235
VERSION BD075235.1 GI:22620838
KEYWORDS JP 2001519660-A/108.
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE
AUTHORS Norberg,L.T., Andersson,M.K. and Lindstrom,P.H.R.
TITLE Methods for assessing cardiovascular status and compositions for use thereof
JOURNAL Patent: JP 2001519660-A 108 23-OCT-2001;
COMMENT EURONA MEDICAL AB
OS Artificial Sequence
PN JP 2001519660-A/108
PD 23-OCT-2001
PF 01-APR-1998 JP 1998542530
PI 04-APR-1997 US 60/042930
PI LEIF TORBJORN NORBERG,MARIA KRISTINA ANDERSSON,PER HARRY PI
RUTGER LINDSTROM
PC C12Q1/68,C07K14/72,C07K14/575,C12N9/48
CC Description of Artificial Sequence: PCR PRIMER PH Key
FEATURES
source
1. .21
/organism="Artificial Sequence".
Location/Qualifiers
1. .21
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 27 AGTGAGGATGATGCCAGGATG 47
|||||
DB 21 AGTGAGGTTGATGCCAGAAAG 1
RESULT 76
AB086505/c
LOCUS AB086505 21 bp DNA linear SYN 21-MAY-2003
DEFINITION Synthetic construct DNA, forward primer for Japanese flounder microsatellite sequence Pol1111TUF.
ACCESSION AB086505
VERSION AB086505.1 GI:28804357
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.

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REFERENCE
AUTHORS Coimbra,M.R.M., Kobayashi,K., Koretsugu,S., Hasegawa,O., Ohara,E.,
Ozaki,A., Sakamoto,T., Naruse,K. and Okamoto,N.
TITLE A genetic linkage map of the Japanese Flounder, (Paralichthys
olivaceus)
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 21)
AUTHORS Coimbra,M.R.M., Kobayashi,K., Koretsugu,S., Hasegawa,O., Ohara,E.,
Ozaki,A., Sakamoto,T., Naruse,K. and Okamoto,N.
TITLE Direct Submission
JOURNAL Submitted (14-JUN-2002) Nobuaki Okamoto, Tokyo University of
Fisheries, Department of Aquatic Biosciences; 4-5-7 Konan,
Minato-ku, Tokyo 108-8477, Japan
(E-mail:nokamoto@tokyo-u-fish.ac.jp, Tel:81-3-5463-0547,
Fax:81-3-5463-0552)
FEATURES
source Location/Qualifiers
1..21
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
misc_feature 1..21
/note="forward primer for Japanese flounder microsatellite
sequence Pol1111TUF"

Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 96;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2522 CGCCTTCTCAGCAGACAC 2542
|||||
Db 21 CCTCCTGCTCAGCAGTAAAC 1

RESULT 77
AR224651/c AR224651 20 bp DNA linear PAT 26-SEP-2002
LOCUS Sequence 110 from patent US 6440738.
DEFINITION AR224651
ACCESSION AR224651
VERSION AR224651.1 GI:233333491
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Wyatt,J.
TITLE Antisense modulation of casein kinase 2-beta expression
JOURNAL Patent: US 6440738-A 110 27-AUG-2002;
FEATURES Location/Qualifiers
source 1..20
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.4%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 93;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 988 CTGCTCTAGAGGGCT 1003
|||||
Db 16 CTGCTCTAGAGGGCT 1

RESULT 78
AR111824 AR111824 19 bp DNA linear PAT 14-FEB-2001
LOCUS Sequence 28 from patent US 6127521.
DEFINITION AR111824
ACCESSION AR111824
VERSION AR111824.1 GI:12828672
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 19)
AUTHORS Berlin,V., Chiu,M.Isabel., Cottarel,G. and Damagnez,V.

```

```

TITLE Immunosuppressant target proteins
JOURNAL Patent: US 6127521-A 28 03-OCT-2000;
FEATURES Location/Qualifiers
source 1..19
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 89;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3689 GAGTTGCAGCAGATGTTTA 3707
|||||
Db 1 GAGTTGCAGCAGATGTTTA 19

RESULT 79
AR236272 AR236272 19 bp DNA linear PAT 20-DEC-2002
LOCUS Sequence 28 from patent US 6464974.
DEFINITION AR236272
ACCESSION AR236272
VERSION AR236272.1 GI:27280093
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 19)
AUTHORS Berlin,V., Chiu,M.I., Cottarel,G. and Damagnez,V.
TITLE Immunosuppressant target proteins
JOURNAL Patent: US 6464974-A 28 15-OCT-2002;
FEATURES Location/Qualifiers
source 1..19
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 89;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3689 GAGTTGCAGCAGATGTTTA 3707
|||||
Db 1 GAGTTGCAGCAGATGTTTA 19

RESULT 80
AR275546 AR275546 19 bp DNA linear PAT 10-APR-2003
LOCUS Sequence 28 from patent US 6509152.
DEFINITION AR275546
ACCESSION AR275546
VERSION AR275546.1 GI:29708964
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 19)
AUTHORS Berlin,V., Chiu,M.I., Cottarel,G. and Damagnez,V.
TITLE Immunosuppressant target proteins
JOURNAL Patent: US 6509152-A 28 21-JAN-2003;
FEATURES Location/Qualifiers
source 1..19
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 89;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3689 GAGTTGCAGCAGATGTTTA 3707
|||||
Db 1 GAGTTGCAGCAGATGTTTA 19

RESULT 81

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AX795182
LOCUS       AX795182               19 bp      DNA          linear      PAT 04-OCT-2003
DEFINITION   Sequence 12 from Patent EPI323825.
ACCESSION    AX795182
VERSION      AX795182.1  GI:37515943
FEATURES             1..20
     KEYWORDS   synthetic construct
     SOURCE      other sequences; artificial sequences.
     ORGANISM    Biogeochem. Institute, University of Tübingen, Germany.

REFERENCE    1
AUTHORS      Giuliano, G., Rosati, C., Dharmapuri, S., Pallara, P. and Camara, B.
TITLE        Recombinant plants and dna constructs
JOURNAL      Patent: EP 1323825-A 12 02-JUL-2003;
             ENEA ENTE PER LE NUOVE TECNOLOGIE, L'ENERGIA E L'AMBIENTE (IT) ;
             Biogen S.r.l. (IT)
FEATURES             Location/Qualifiers
     source     1..19
                /organism="synthetic construct"
                /mol_type="unassigned DNA"
                /db_xref="taxon:32630"
     primer_bind 1..19
                /note="Downstream primer used to detect the expression of
                the Phytoene desaturase gene by RT-PCR"
     primer_bind 1..19
                /note="Pds Downstream Primer"

Query Match      0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 89;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1716 TCACCTCCAGTCTTCAGG 1734
Db      1 TCCTCTTCAGTCTTCAGG 19

RESULT 82
AR058876
LOCUS       AR058876               20 bp      DNA          linear      PAT 29-SEP-1999
DEFINITION   Sequence 8 from patent US 5837835.
ACCESSION    AR058876
VERSION      AR058876.1  GI:5984453
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3303 TATTTTATTTTATATAT 3321
Db      1 TATATATATTTTATATAT 19

RESULT 83
AR079581
LOCUS       AR079581               20 bp      DNA          linear      PAT 31-AUG-2000
DEFINITION   Sequence 8 from patent US 5965720.
ACCESSION    AR079581
VERSION      AR079581.1  GI:10006325
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3303 TATTTTATTTTATATAT 3321
Db      1 TATATATATTTTATATAT 19

REFERENCE    1 (bases 1 to 20)
AUTHORS      Gryaznov, S.M., Schultz, R.G. and Chen, J.-k.
TITLE        Oligonucleotide N3'-p5' phosphoramidates: hybridization and
             nuclelease resistance properties
JOURNAL      Patent: US 5837835-A 8 17-NOV-1998;
             Gryaznov, S.M., Schultz, R.G. and Chen, J.-k.
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3766 TGGCTGGGATCCCTCCCT 3784
Db      20 TGGCTGGCATCCCTCTCCT 2

RESULT 85
AR123290
LOCUS       AR123290               20 bp      DNA          linear      PAT 16-MAY-2001
DEFINITION   Sequence 8 from patent US 6169170.
ACCESSION    AR123290
VERSION      AR123290.1  GI:14108256
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3766 TGGCTGGGATCCCTCCCT 3784
Db      20 TGGCTGGCATCCCTCTCCT 2

REFERENCE    1 (bases 1 to 20)
AUTHORS      Gryaznov, S.M., Schultz, R.G. and Chen, J.-k.
TITLE        Oligonucleotide N3', f5darn, N5'Phosphoramidate Duplexes
JOURNAL      Patent: US 6169170-A 8 02-JAN-2001;
             Gryaznov, S.M., Schultz, R.G. and Chen, J.-k.
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3303 TATTTTATTTTATATAT 3321
Db      1 TATATATATTTTATATAT 19
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REFERENCE    1 (bases 1 to 20)
AUTHORS      Gryaznov, S.M., Schultz, R.G. and Chen, J.-k.
TITLE        Oligonucleotide N3', f5darn, p5' phosphoramidates
JOURNAL      Patent: US 5965720-A 8 12-OCT-1999,
             Gryaznov, S.M., Schultz, R.G. and Chen, J.-k.
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3303 TATTTTATTTTATATAT 3321
Db      1 TATATATATTTTATATAT 19

RESULT 84
AR099520/c
LOCUS       AR099520               20 bp      DNA          linear      PAT 14-FEB-2001
DEFINITION   Sequence 47 from patent US 6077833.
ACCESSION    AR099520
VERSION      AR099520.1  GI:12809286
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3766 TGGCTGGGATCCCTCCCT 3784
Db      20 TGGCTGGCATCCCTCTCCT 2

REFERENCE    1 (bases 1 to 20)
AUTHORS      Bennett, C.Frank. and Vickers, T.A.
TITLE        Oligonucleotide compositions and methods for the modulation of the
             expression of B7 protein
JOURNAL      Patent: US 6077833-A 47 20-JUN-2000;
             Bennett, C.Frank. and Vickers, T.A.
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3766 TGGCTGGGATCCCTCCCT 3784
Db      20 TGGCTGGCATCCCTCTCCT 2

REFERENCE    1 (bases 1 to 20)
AUTHORS      Gryaznov, S.M., Schultz, R.G. and Chen, J.-k.
TITLE        Oligonucleotide N3', f5darn, N5'Phosphoramidate Duplexes
JOURNAL      Patent: US 6169170-A 8 02-JAN-2001;
             Gryaznov, S.M., Schultz, R.G. and Chen, J.-k.
FEATURES             Location/Qualifiers
     source     1..20
                /organism="unknown"
                /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3303 TATTTTATTTTATATAT 3321
Db      1 TATATATATTTTATATAT 19
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RESULT 86
AR129530/c
LOCUS AR129530 20 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 119 from patent US 6187533.
ACCESSION AR129530
VERSION AR129530.1 GI:14117427
KEYWORDS
SOURCE
ORGANISM
REFERENCE
1 (bases 1 to 20)
AUTHORS Bell,G.I., Yamagata,K., Oda,N., Kaisaki,P.J., Furuta,H.,
Horikawa,Y. and Menzel,S.
TITLE Mutations in the diabetes susceptibility genes hepatocyte nuclear
factor (HNF) 1 alpha (.alpha.), HNF1.beta. and HNF4.alpha
JOURNAL Patent: US 6187533-A 119 13-FEB-2001;
FEATURES
Location/Qualifiers
source 1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3766 TGGCTGGGATCCCTCCCT 3784
Db 20 TGGCTGGGATCCCTCTCT 2

RESULT 89
BD138261/c
LOCUS BD138261 20 bp DNA linear PAT 18-SEP-2002
DEFINITION Antisense modulation of human MDM2 expression.
ACCESSION BD138261
VERSION BD138261.1 GI:23233206
KEYWORDS JP 2002508944-A/187.
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 20)
AUTHORS Miraglia,L.J., Nero,P., Graham,M.J., Monia,B.P. and Cowseert,L.M.
TITLE Antisense modulation of human MDM2 expression
JOURNAL Patent: JP 2002508944-A 187 26-MAR-2002;
COMMENT ISIS PHARMACEUTICALS INC
OS Unidentified
PN JP 2002508944-A/187
PD 26-MAR-2002
PF 26-MAR-1999 JP 2000538025
PR 26-MAR-1998 US 09/048810
PI LOREN J MIRAGLIA, PAMELA NERO, MARK J GRAHAM, BRETT P MONIA, LEX M
COWSEERT
PI C12N15/09,A61K48/00,A61P9/10,A61P17/06,A61P35/00,C07H21/04//
PC C12Q1/68,
PC C12N15/00
CC Strandedness: Single;
CC Topology: Linear;
CC Antisense modulation of human MDM2 expression FH Key
CC Antisense modulation of human MDM2 expression FH Key
FT source 1..20
Location/Qualifiers
/organism="Unidentified".
FEATURES
Location/Qualifiers
source 1..20
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2916 AAGGAACCCATGACAAAGA 2934
Db 19 AAGAAACCCAGACAAAGA 1

RESULT 90
BD188892
LOCUS BD188892 20 bp DNA linear PAT 17-JUL-2003
DEFINITION Oligonucleotide N3' to p5' phosphoramidate: synthesis and compound;
hybridization and nuclease tolerant characteristics.
ACCESSION BD188892
VERSION BD188892.1 GI:32998631
KEYWORDS JP 2003012688-A/8.
SOURCE unidentified

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ORGANISM      unidentified
unclassified.
1 (bases 1 to 20)
REFERENCE      Gryaznov,S.M., Schultz,R.G. and Chen,J.
AUTHORS        Oligonucleotide N3' to 5' phosphoramidate: synthesis and compound
TITLE          hybridization and nuclease tolerant characteristics
JOURNAL        Patent: JP 2003012688-A 8 15-JAN-2003;
COMMENT        LYNX THERAPEUTICS INC
               OS Unidentified
               PN JP 2003012688-A/8
               PD 15-JAN-2003
               PF 12-JUN-2002 JP 2002171743
               PR 18-MAR-1994 US 08/210505,18-MAR-1994 US 08/214599 PI
               SERGEI M GRAYZNOV, RONALD G SCHULTZ, JER-KANG CHEN PC
               C07H19/16//C12Q1/02,C12Q1/68
               CC Strandedness: Both;
               CC Topology: Linear;
               CC /note= 'where the intersubunit bond is 'np''
               CC /note= 'where the intersubunit bond is 'np''
               CC /note= 'where the intersubunit bond is 'np''
               CC /note= 'where the intersubunit bond is 'np''
               FH Key Location/Qualifiers
               FT misc_feature 1..2
               FT misc_feature 3..4
               FT misc_feature 5..6
               FT misc_feature 7..8.
               FT Location/Qualifiers
FEATURES
source
1..20
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3303 TATTTTATTTTATATAT 3321
      ||| | ||||| |||||
      1 TATATATATTTTATATAT 19

Db

RESULT 91
BD228177      20 bp DNA linear PAT 17-JUL-2003
LOCUS          Antisense oligonucleotide regulation of expression of tumor
DEFINITION     necrosis factor-alpha (TNF-alpha).
ACCESSION      BD228177.1 GI:33037947
VERSION        JP 2002526125-A/380.
KEYWORDS       synthetic construct
SOURCE         other sequences; artificial sequences.
ORGANISM       1 (bases 1 to 20)
REFERENCE      Baker,B.F., Bennett,F.C., Butler,M.M. and Jr,W.J.S.
AUTHORS        Antisense oligonucleotide regulation of expression of tumor
TITLE          necrosis factor-alpha (TNF-alpha)
JOURNAL        Patent: JP 2002526125-A 380 20-AUG-2002;
COMMENT        ISIS PHARMACEUTICALS INC
               OS Artificial Sequence
               PN JP 2002526125-A/380
               PD 20-AUG-2002
               PF 05-OCT-1999 JP 2000574737
               PR 05-OCT-1998 US 09/166186,18-MAY-1999 US 09/313932 PI
               BRENDA F BAKER, FRANK C BENNETT, MADELINE M BUTLER, WILLIAM J PI
               SHANAHAN JR
               PC C12N15/09,A61K31/7115,A61K31/712,A61K31/7125,A61K48/00,A61P1/
               PC 00,A61P1/16,
               PC A61P1/18,A61P3/10,A61P17/00,A61P17/04,A61P29/00,A61P31/00, PC
               C07H21/02,C12N15/00
               PC C07H21/04,C12N15/00
               CC Synthetic
               FH Key Location/Qualifiers
               FT source
               1..20

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FT      /organism='Artificial Sequence'.
FEATURES
source
Location/Qualifiers
1..20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3414 TTTCAAGGAAGTATGGAAA 3432
      ||||| ||||| |||||
      1 TCTCAGGAAGTCTGGAAA 19

Db

RESULT 92
CQ786110/c      20 bp DNA linear PAT 24-MAR-2004
LOCUS          Sequence 34 from Patent WO2004018711.
DEFINITION     CQ786110
ACCESSION      CQ786110
VERSION        CQ786110.1 GI:45721213
KEYWORDS       synthetic construct
SOURCE         synthetic construct
ORGANISM       other sequences; artificial sequences.
REFERENCE      1
AUTHORS        Ming-Qing,D.
TITLE          Diagnostic test
JOURNAL        Patent: WO 2004018711-A 34 04-MAR-2004;
               University College London (GB)
FEATURES
source
1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer for identification of HPV 45"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1995 ACACCTTCAGATAAGCAGG 2013
      ||||| ||||| |||||
      20 ACACCTCCAGAAAGCAGG 2

Db

RESULT 93
I33253      20 bp DNA linear PAT 06-FEB-1997
LOCUS          Sequence 8 from patent US 5591607.
DEFINITION     I33253
ACCESSION      I33253
VERSION        I33253.1 GI:1824044
KEYWORDS       Unknown.
SOURCE         Unassigned.
ORGANISM       Unclassified.
REFERENCE      1 (bases 1 to 20)
AUTHORS        Gryaznov,S.M., Schultz,R.G. and Chen,J.-k.
TITLE          Oligonucleotide N3.fwdarw.P5' phosphoramidates: triplex DNA
               formation
JOURNAL        Patent: US 5591607-A 8 07-JAN-1997;
COMMENT        Location/Qualifiers
               1..20
               /organism="unknown"
               /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3303 TATTTTATTTTATATAT 3321
      ||| | ||||| |||||

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Db      1 TATATATATTTTATATAT 19

RESULT 94
I35518
LOCUS      I35518                20 bp      DNA      linear      PAT 13-MAY-1997
DEFINITION Sequence 8 from patent US 5599922.
ACCESSION  I35518
VERSION     I35518.1 GI:2080486
KEYWORDS    Unknown.
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 20)
AUTHORS     Gryaznov,S.M., Schultz,R.G. and Chen,J.-K.
TITLE       Oligonucleotide N3'-p5' phosphoramidates: hybridization and
           nuclease resistance properties
JOURNAL     Patent: US 5599922-A 8 04-FEB-1997;
FEATURES    Location/Qualifiers
            source
              1..20
              /organism="unknown"
              /mol_type="unassigned DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3303 TATTTTATTTTATATAT 3321
Db      1 TATATATATTTTATATAT 19

RESULT 97
AR432353/c
LOCUS      AR432353                20 bp      DNA      linear      PAT 18-DEC-2003
DEFINITION Sequence 153 from patent US 6653133.
ACCESSION  AR432353
VERSION     AR432353.1 GI:40194626
KEYWORDS    Unknown.
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 20)
AUTHORS     Dean,N.M., Marcussen,B.G. and Wyatt,J.
TITLE       Antisense modulation of Fas mediated signaling
JOURNAL     Patent: US 6653133-A 153 25-NOV-2003;
FEATURES    Location/Qualifiers
            source
              1..20
              /organism="unknown"
              /mol_type="genomic DNA"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      861 TTAAGAAATAATTTTGATA 879
Db      20 TTAAGAAATAATATTTTATA 2

RESULT 98
AX004440
LOCUS      AX004440                20 bp      DNA      linear      PAT 24-AUG-2000
DEFINITION Sequence 22 from Patent WO9916899.
ACCESSION  AX004440
VERSION     AX004440.1 GI:9927899
KEYWORDS    synthetic construct
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Anctil,J.L. and Cote,G.
TITLE       Molecular diagnostic of glaucomas associated with chromosomes 2 and
JOURNAL     Patent: WO 9916899-A 22 08-APR-1999;
FEATURES    ANCTIL JEAN LOUIS (CA); COTE GILLES (CA)
            Location/Qualifiers
            source
              1..20
              /organism="synthetic construct"
              /mol_type="unassigned DNA"
              /db_xref="taxon:32630"
              /note="OLIGONUCLEOTIDE"

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3735 GGACCTATGAATCTATTTA 3753
Db      1 TATATATATTTTATATAT 19

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Db 1 GGAAGTGTGAATCTATTTA 19

RESULT 99
AX665199/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM

AX665199
Sequence 36 from Patent EP1275716.
AX665199
ACCESSION
AX665199.1 GI:29290323
KEYWORDS
synthetic construct
synthetic construct
other sequences; artificial sequences.

REFERENCE
1
AUTHORS
TITLE
JOURNAL

Okuda,T., Saito,S., Dorsey,K.M. and Tsuzaki,Y.
Modified dna molecule, recombinant containing the same thing, and
uses thereof
Patent: EP 1275716-A 36 15-JAN-2003;
Zeon Corporation (JP)

FEATURES
source
1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer M11-7"

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 3702 TGTATTATTTTTCAGAAC 3720
Db 19 TGTATTATTTTTCAGAAC 1

RESULT 100
BD012503
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM

BD012503
Guanosine triphosphate-binding protein-coupled receptors, genes
thereof and production and use of the same.
BD012503
BD012503.1 GI:22092692
KEYWORDS
WO 0109323-A/20.
SOURCE
Homo sapiens (human)

REFERENCE
AUTHORS
TITLE
JOURNAL

Ota,T., Isogai,T., Nishikawa,T., Hayaishi,K., Saito,K., Yamamoto,J.,
Ishii,S., Sugiyama,T., Makamatsu,A., Nagai,K., Otsuki,T.,
Kishimoto,T., Yano,K., Kanazaki,K. and Inoue,Y.
Guanosine triphosphate-binding protein-coupled receptors, genes
thereof and production and use of the same
Patent: WO 0109323-A 20 08-FEB-2001;
HELIX RESEARCH INSTITUTE,TOSHIO OTA,TAKAO ISOGAI,TETSUO NISHIKAWA,
KOJI HAYASHI,KAZUO SAITO,JUNICHI YAMAMOTO,SHIZUKO ISHII, OMOYASU
SUGIYAMA, AI WAKAMATSU,KEIICHI NAGAI,TETSUJI OTSUKI,TOSHIMITSU
KISHIMOTO, KAZUHIRO YANO,KOJI KANZAKI,YOSHIHISA INOUE
PN WO 0109323-A/20
PD 08-FEB-2001
PF 28-JUL-2000 WO 2000JP005070
PR 29-JUL-1999 JP 99P 248036, 27-AUG-1999 JP 99P 300253 PR
11-JAN-2000 JP 00P 118776, 02-MAY-2000 JP 00P 183767 PR
18-OCT-1999 US 60/159590, 17-FEB-2000 US 60/183322 PI
OTA,TAKAO ISOGAI,TETSUO NISHIKAWA,KOJI HAYASHI, PI KAZUO SAITO,
PI JUNICHI YAMAMOTO,SHIZUKO ISHII,TOMOYASU SUGIYAMA,AI WAKAMATSU,
PI KEIICHI NAGAI,TOSHIMITSU OTSUKI,TOSHIMITSU KISHIMOTO, PI
KAZUHIRO YANO,
PI KOJI KANZAKI,YOSHIHISA INOUE
PC C12N15/12,C12N15/63,C12P21/02,C07K14/705,C07K16/28,A61K45/00,
PC A61P35/00,
PC A61P25/28,G01N33/566,G01N33/50,G01N33/15
CC Description of Artificial Sequence: an artificially

synthesized primer
CC A61P35/00,
CC sequence
FH key Location/Qualifiers.
FEATURES
source
1..20
Location/Qualifiers
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 97;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 516 GCCCTGGAGCCTTTCTG 534
Db 1 GCCCTGGTGGCCTTCTCTG 19

RESULT 101
BD136927/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM

BD136927
Oligonucleotide for amplification and detection of Epstein-Bar
virus (EBV) nucleic acid.
BD136927
BD136927.1 GI:23231872
KEYWORDS
JP 2002505122-A/25.
Human herpesvirus 4 (Epstein-Barr virus)
Human herpesvirus 4
Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
Gammaherpesvirinae; Lymphocryptovirus.
1 (bases 1 to 21)
Vervooort,M.B.H.J., Den,A.J.C.V. and Middelorp,J.M.
Oligonucleotide for amplification and detection of Epstein-Bar
virus (EBV) nucleic acid
Patent: JP 2002505122-A 25 19-FEB-2002;
AKZO NOBEL NV

COMMENT
OS Epstein-barr virus
PN JP 2002505122-A/25
PD 19-FEB-2002
PF 01-MAR-1999 JP 2000534686
PR 04-MAR-1998 EP 98200655.3,14-DEC-1998 EP 98204231.9 PI
MARCEL BARTOLINA HENDRIKUS JOHANNES VERVOORT, PI ADRIANUS
JOHANNES CHRISTIAAN VAN DEN BRULE, JAAP MICHEL PI MIDDELDORP
PC C12N15/09,C12Q1/68,C12Q1/70,C12N15/00
CC Strandedness: single;
CC Topology: linear;
CC Oligonucleotide for amplification and detection of Epstein-Bar
virus (EBV) nucleic acid

FEATURES
source
1..21
Location/Qualifiers
/organism="Human herpesvirus 4"
/mol_type="genomic DNA"
/db_xref="taxon:10376"

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2319 GCTGCCAACATCATCATG 2337
Db 21 GCTGCCAACATTCCTCATG 3

RESULT 102
AX018466/c
LOCUS
DEFINITION

AX018466
Sequence 25 from Patent WO9945155.
AX018466
ACCESSION
AX018466.1 GI:184661
KEYWORDS
linear DNA
PAT 07-SRP-2000
DEFINITION
Sequence 25 from Patent WO9945155.

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ACCESSION AX018466
VERSION AX018466.1 GI:10042617
KEYWORDS
SOURCE Human herpesvirus 4 (Epstein-Barr virus)
ORGANISM Human herpesvirus 4
REFERENCE Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
AUTHORS Gammaherpesvirinae; Lymphocryptovirus.
TITLE Middeldorp,J.M., Van Den Brule,A.J. and Vervoot,M.B.
JOURNAL Oligonucleotides for the amplification and detection of Epstein
Patent: WO 945155-A 25 10-SEP-1999;
barr virus (ebv) nucleic acid
MIDDELDORP JAAP MICHEL (NL); AKZO NOBEL NV (NL); DEN BRULE
ADRIANUS JOHANNES CH (NL); VERVOORT MARCEL BARTOLINA HEND (NL)
FEATURES
source
1..21
/organism="Human herpesvirus 4"
/mol_type="unassigned DNA"
/db_xref="taxon:10376"

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1e+02; 2; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2319 GCTGCCAATCATCCATG 2337
|||||
Db 21 GCTGCCAATCATCCATG 3

RESULT 103
AX921483/21 bp DNA linear PAT 18-DEC-2003
LOCUS AX921483
DEFINITION Sequence 476 from Patent WO02068652.
ACCESSION AX921483
VERSION AX921483.1 GI:40215104
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Nov-x proteins and nucleic acids encoding same
TITLE Patent: WO 02068652-A 476 06-SEP-2002;
JOURNAL Location/Qualifiers
FEATURES
source
1..21
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Description of Artificial Sequence: oligonucleotide primer"

Query Match 0.4%; Score 15.8; DB 1; Length 21;
Best Local Similarity 89.5%; Pred. No. 1e+02; 2; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2626 GGAATCCAGAGGAACAGT 2644
|||||
Db 21 GGAATCCAGAGGAACAGT 3

RESULT 104
AR046255/17 bp DNA linear PAT 29-SEP-1999
LOCUS AR046255
DEFINITION Sequence 1048 from patent US 5817796.
ACCESSION AR046255
VERSION AR046255.1 GI:5967720
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 17)
AUTHORS Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
TITLE C-myb ribozymes having 2',5'-linked adenylate residues

JOURNAL Patent: US 5817796-A 1048 06-OCT-1998;
FEATURES
source
1..17
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 82;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3305 TTTTATTTTATATAT 3321
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Db 1 TTTTATTTTATATAT 17

RESULT 105
153307/17 bp DNA linear PAT 07-OCT-1997
LOCUS 153307
DEFINITION Sequence 1048 from patent US 5646042.
ACCESSION 153307
VERSION 153307.1 GI:2474510
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 17)
AUTHORS Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
TITLE C-myb targeted ribozymes
JOURNAL Patent: US 5646042-A 1048 08-JUL-1997;
FEATURES
source
1..17
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 82;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3305 TTTTATTTTATATAT 3321
|||||
Db 1 TTTTATTTTATATAT 17

RESULT 106
AX729602/c/17 bp DNA linear PAT 08-MAY-2003
LOCUS AX729602
DEFINITION Sequence 1236 from Patent WO03025175.
ACCESSION AX729602
VERSION AX729602.1 GI:30508945
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Telerman,A., Amson,R. and Tuijinder,M.
TITLE Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or virus resistance and their use as
medicines
JOURNAL Patent: WO 03025175-A 1236 27-MAR-2003;
FEATURES
source
1..17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 82;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2411 TGAATATGAGATTGCTC 2427
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Db 17 TGAATATGAGATTGATC 1

RESULT 107
LOCUS AR042291/c 18 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 1081 from patent US 5811300.
ACCESSION AR042291
VERSION AR042291.1 GI:5962787
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 18)
AUTHORS Sullivan,S., Draper,K., Kisich,K., Stinchcomb,D.T. and McSwiggen,J.
TITLE TNF- α , ribozymes
JOURNAL Patent: US 5811300-A 1081 22-SEP-1998;
FEATURES
source 1. .18
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 89;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3416 TCAAGGAAGTATGGAAA 3432
Db 18 TCAGGGAAGTCTGGAAA 2

RESULT 108
LOCUS AR083517/c 18 bp DNA linear PAT 01-SEP-2000
DEFINITION Sequence 56 from patent US 5976873.
ACCESSION AR083517
VERSION AR083517.1 GI:10010290
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 18)
AUTHORS Bohinski,R.J. and Whitsett,J.A.
TITLE Nucleic acid sequences controlling lung cell-specific gene expression
JOURNAL Patent: US 5976873-A 56 02-NOV-1999;
FEATURES
source 1. .18
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 89;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1798 CCCTCCAGGTCTTGAT 1814
Db 17 CCCTCCAGGTCTTGAT 1

RESULT 109
LOCUS AR083519 18 bp DNA linear PAT 01-SEP-2000
DEFINITION Sequence 58 from patent US 5976873.
ACCESSION AR083519
VERSION AR083519.1 GI:10010292
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 18)
AUTHORS Bohinski,R.J. and Whitsett,J.A.
TITLE Nucleic acid sequences controlling lung cell-specific gene

expression
Patent: US 5976873-A 58 02-NOV-1999;
FEATURES
source 1. .18
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 89;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1798 CCCTCCAGGTCTTGAT 1814
Db 2 CCCTCCAGGTCTTGAT 18

RESULT 110
LOCUS AX637740/c 18 bp RNA linear PAT 21-FEB-2003
DEFINITION Sequence 4879 from Patent EP1260586.
ACCESSION AX637740
VERSION AX637740.1 GI:28473354
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1
AUTHORS Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Drenzo,A., Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J., McSwiggen,J.A., Modak,A., Pavlov,P., Beigelman,L., Sullivan,S.M., Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and Woolf,T.
TITLE Method and reagent for inhibiting the expression of disease related genes
JOURNAL Patent: EP 1260586-A 4879 27-NOV-2002;
FEATURES
source 1. .18
/organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 89;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3416 TCAAGGAAGTATGGAAA 3432
Db 18 TCAGGGAAGTCTGGAAA 2

RESULT 111
LOCUS CQ788034/c 19 bp DNA linear PAT 24-MAR-2004
DEFINITION Sequence 340 from Patent WO2004020664.
ACCESSION CQ788034
VERSION CQ788034.1 GI:45722987
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Geldermann,H., Preuss,S. and Han,Y.
TITLE Polymorphous microsatellite loci in genes for pre-diagnostic purposes
JOURNAL Patent: WO 2004020664-A 340 11-MAR-2004;
FEATURES
source 1. .19
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

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satellite      1..19
/note="M09, Allel R (Prp-Gen)"
repeat_unit    1..4
/note="Anzahl der Wiederholungen: 4"
repeat_unit    9..12
/note="Anzahl der Wiederholungen: 5"
repeat_unit    13..15
/note="Anzahl der Wiederholungen: 1"
repeat_unit    16..19
/note="Anzahl der Wiederholungen: 1"

Query Match    0.4%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 97;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1061 TATTATTGACTTATTTA 1077
Db 17 TATTATTACTTATTTA 1

RESULT 112
LOCUS AR100497 20 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 228 from patent US 6080580.
ACCESSION AR100497
VERSION AR100497.1 GI:12810945
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Baker,B.F., Bennett,C.Frank., Butler,M.M. and Shanahan,W.R. Jr.
TITLE Antisense oligonucleotide modulation of tumor necrosis
factor-alpha (TNF-alpha.) expression
JOURNAL Patent: US 6080580-A 228 27-JUN-2000;
FEATURES
source Location/Qualifiers
1..20
/mol_type="unassigned DNA"

Query Match    0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3416 TCAAGGAAGTCTGGAAA 3432
Db 1 TCAAGGAAGTCTGGAAA 17

RESULT 113
LOCUS AR150152 20 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 228 from patent US 6228642.
ACCESSION AR150152
VERSION AR150152.1 GI:15114743
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Baker,B.F., Bennett,C.Frank., Butler,M.M. and Shanahan,W.R. Jr.
TITLE Antisense oligonucleotide modulation of tumor necrosis
factor-(alpha.) (TNF-alpha.) expression
JOURNAL Patent: US 6228642-A 228 08-MAY-2001;
FEATURES
source Location/Qualifiers
1..20
/mol_type="unassigned DNA"

Query Match    0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 3416 TCAAGGAAGTCTGGAAA 3432
Db 1 TCAAGGAAGTCTGGAAA 17

RESULT 114
LOCUS BD228025 20 bp DNA linear PAT 17-JUL-2003
DEFINITION Antisense oligonucleotide regulation of expression of tumor
nerosis factor-alpha (TNF-alpha).
ACCESSION BD228025
VERSION BD228025.1 GI:33037795
KEYWORDS JP 2002526125-A/228.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 20)
AUTHORS Baker,B.F., Bennett,F.C., Butler,M.M. and Jr,W.J.S.
TITLE Antisense oligonucleotide regulation of expression of tumor
nerosis factor-alpha (TNF-alpha)
JOURNAL Patent: JP 2002526125-A 228 20-AUG-2002;
COMMENT ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002526125-A/228
PD 20-AUG-2002
PF 05-OCT-1999 JP 2000574737
PR 05-OCT-1998 US 09/166186 18-MAY-1999 US 09/313932 PI
BRENDA F BAKER, FRANK C BENNETT, MADELINE M BUTLER, WILLIAM J PI
SHANAHAN JR
PC C12N15/09,A61K31/7115,A61K31/712,A61K48/00,A61P1/
PC 00,A61P1/16,
PC A61P1/18,A61P3/10,A61P17/00,A61P17/04,A61P29/00,A61P31/00, PC
C07H21/02,
PC C07H21/04,C12N15/00
CC Synthetic
FH Key
FT source Location/Qualifiers
1..20
/mol_type="synthetic construct"
/db_xref="taxon:32630"

Query Match    0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3416 TCAAGGAAGTCTGGAAA 3432
Db 1 TCAAGGAAGTCTGGAAA 17

RESULT 115
LOCUS BD235863/c 20 bp DNA linear PAT 17-JUL-2003
DEFINITION Method of estimating bone fracture frequency by screening
polymorphism in vitamin D receptor gene.
ACCESSION BD235863
VERSION BD235863.1 GI:33045633
KEYWORDS JP 2002525074-A/4.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 20)
AUTHORS Uitterlinden,A.G., Van,J.P.T.M., Leeuwen and Pols,H.A.P.
TITLE Method of estimating bone fracture frequency by screening
polymorphism in vitamin D receptor gene
JOURNAL Patent: JP 2002525074-A 4 13-AUG-2002;
COMMENT ERASMUS UNIVERSITEIT ROTTERDAM
OS Artificial Sequence
PN JP 2002525074-A/4
PD 13-AUG-2002

```

PF 10-SEP-1999 JP 2000570366
PR 10-SEP-1998 GB 9813769.2
PI ANDREAS GERARDUS UITTERLINDEN, JOHANNES PETRUS THOMAS MARIA VAN

PI LEEUWEN,
PI HUIBERT ADRIAAN PIETER POLS
PC C12N15/09, C12Q1/68, C12N15/00
CC Description of Artificial Sequence: Synthetic
FH Key Location/Qualifiers
FT source 1..20
FT /organism='Artificial Sequence'.
FEATURES
source
Location/Qualifiers
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/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0;

QY 2209 GCCAGGATGAGGACTGG 2225
Db 19 GCCAGGATGAGGCTGG 3

RESULT 116
CQ829824/c 20 bp DNA linear PAT 05-JUL-2004
LOCUS
DEFINITION Sequence 5 from Patent WO2004053116.
ACCESSION CQ829824
VERSION CQ829824.1 GI:49732949
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1 other sequences; artificial sequences.
AUTHORS Schwenzner, B., Schmidt, U., Wirth, M.P., Kraemer, K., Fuessel, S. and Meye, A.
TITLE Polynucleotides targeted against htert and use thereof
JOURNAL Patent: WO 2004053116-A 5 24-JUN-2004;
Technische Universitaet Dresden (DE)
FEATURES
source
Location/Qualifiers
1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Beschreibung der k nstlichen Sequenz:
anti-hTERT-AS-Konstrukt"

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0;

QY 468 AGCCACCTCTCTACCTT 484
Db 17 AGCCACGTCCTCTACCTT 1

RESULT 117
CQ867622 20 bp DNA linear PAT 13-SEP-2004
LOCUS
DEFINITION Sequence 4 from Patent WO2004074830.
ACCESSION CQ867622
VERSION CQ867622.1 GI:51997814
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1 other sequences; artificial sequences.
AUTHORS Golz, S., Brueggemeier, U. and Summer, H.
TITLE Diagnostics and therapeutics for diseases associated with g-protein coupled receptor prostaglandin e2 ep3 iii (prostaglandin e2 ep3

iii)
JOURNAL Patent: WO 2004074830-A 4 02-SEP-2004;
Bayer Healthcare AG (DE)
FEATURES
source
Location/Qualifiers
1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="reverse primer"

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0;

QY 2834 TCAGGAGCTTCCAGTG 2850
Db 1 TCATGGAGCTTCCAGTG 17

RESULT 118
I25313 20 bp DNA linear PAT 07-OCT-1996
LOCUS
DEFINITION Sequence 100 from patent US 5550020.
ACCESSION I25313
VERSION I25313.1 GI:1605183
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Gallie, B.L., Dunn, J.M. and Stevens, J.K.
TITLE Method, reagents and kit for diagnosis and targeted screening for retinoblastoma
JOURNAL Patent: US 5550020-A 100 27-AUG-1996;
FEATURES
source
Location/Qualifiers
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0;

QY 1830 ATAATGACTTCCAAAAA 1846
Db 4 ATAATGACTTCCAAAAA 20

RESULT 119
AR213949/c 20 bp DNA linear PAT 25-SEP-2002
LOCUS
DEFINITION Sequence 41 from patent US 6406846.
ACCESSION AR213949
VERSION AR213949.1 GI:23311368
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Whitcomb, D., Ehrlich, G.D. and Gorry, M.C.
TITLE Method for determining whether a human patient is susceptible to hereditary pancreatitis, and primers therefore
JOURNAL Patent: US 6406846-A 41 18-JUN-2002;
FEATURES
source
Location/Qualifiers
1..20
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02; Mismatches 1; Indels 0; Gaps 0;
Matches 16; Conservative 0;

QY 1098 TCATTTTCCCTGGTGAG 1114

```

|||||
19 TCATTTCCTCGTGGG 3

RESULT 120
LOCUS AR317378 20 bp DNA linear PAT 17-AUG-2003
DEFINITION Sequence 30 from patent US 6562955.
ACCESSION AR317378
VERSION AR317378.1 GI:33698472
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Ishizuka,T., Ishiguro,T. and Saitoh,J.
TITLE Oligonucleotides for detection of Vibrio parahaemolyticus and
detection method for Vibrio parahaemolyticus using the same
oligonucleotides
JOURNAL Patent: US 6562955-A 30 13-MAY-2003;
FEATURES
source
Location/Qualifiers
1..20
/organism="unknown"
/mol_type="genomic DNA"

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1089 AATGTTTCTTCATTTC 1105
|||||
Db 4 AATGATTCTTCATTTC 20

RESULT 121
LOCUS BD084033 20 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting thermostable hemolysin-analogous hemolysin
gene of Vibrio parahaemolyticus.
ACCESSION BD084033
VERSION BD084033.1 GI:22629643
KEYWORDS JP 2001340087-A/6.
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 20)
AUTHORS Ishizuka,T., Ishiguro,T. and Saito,J.
TITLE Method for detecting thermostable hemolysin-analogous hemolysin
gene of Vibrio parahaemolyticus
JOURNAL Patent: JP 2001340087-A 6 11-DEC-2001;
TOSOH CORP
COMMENT OS Artificial Sequence
PN JP 2001340087-A/6
PD 11-DEC-2001
PF 31-MAY-2000 JP 2000166504
PI TETSUYA ISHIZUKA, TAKAIKO ISHIGURO, JUICHI SAITO PC
C12N15/09,C12Q1/68,C12Q1/69,G01N33/56,G01N33/569, PC
G01N33/58//
PC C12Q1/04, (C12Q1/68, C12R1:63), (C12Q1/04, C12R1:63), C12N15/00 CC
Primer
FH key Location/Qualifiers
FT source 1..20
/organism='Artificial Sequence'.
FEATURES
source
Location/Qualifiers
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/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 1e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1089 AATGTTTCTTCATTTC 1105
|||||
Db 4 AATGATTCTTCATTTC 20

RESULT 122
LOCUS A86518 20 bp DNA linear PAT 21-JAN-2000
DEFINITION Sequence 4 from Patent WO9839472.
ACCESSION A86518
VERSION A86518.1 GI:6735117
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Wagener,C.
TITLE METHOD FOR DETECTING MUTATED ALLELS
JOURNAL Patent: WO 9839472-A 4 11-SEP-1998;
WAGENER CHRISTOPH (DE)
FEATURES
source
Location/Qualifiers
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/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3173 TTTTAAGTCGTCTCCTTAC 3192
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Db 1 TTTCACCTCTGCTCCTTCC 20

RESULT 123
LOCUS AR030970/c 20 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 2 from patent US 5861501.
ACCESSION AR030970
VERSION AR030970.1 GI:5944184
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 20)
AUTHORS Benseler,F., Cole,J.L., Olsen,D.B. and Kuo,L.C.
TITLE Capped synthetic RNA, analogs, and aptamers
JOURNAL Patent: US 5861501-A 2 19-JAN-1999;
FEATURES
source
Location/Qualifiers
1..20
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2683 GAAGAGGAGAAATAAAACC 2702
|||||
Db 20 GAAATTTAAATAAAACC 1

RESULT 124
LOCUS AR100074/c 20 bp DNA linear PAT 14-FEB-2001
DEFINITION Sequence 31 from patent US 6080546.
ACCESSION AR100074
VERSION AR100074.1 GI:12810522
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
unclassified.

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Qy 1317 TTGAGTTTCAAAGGTTGCTG 1336
pb 1 TTGAGTTTCAAGCTTGCTG 20

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PR 04-MAY-2001 TW 90110785
PI CHING-YEE LING, RUEY-WEN LIN, ZHOU-MENG YOO, XIN-HSUAN HUANG, BOW-
PI HAENG LEE.
PI SHENG-HSIUNG LEE, YI-JU LIN, CI-CHUNG HUANG, HAN-CHANG HSU, CHA-
PI WEN SHI,
PI CHIH-XIN YEH, YI-FENG CAO, CHIH-LONG PAN
PC C12N15/09, C12N15/09, C12M1/34, C12Q1/04, C12Q1/42, C12Q1/68 PC
' C12Q1/70, G01N21/64,
PC G01N33/53, G01N33/574, G01N37/00 // (C12M1/34, C12R1:93),
PC (C12Q1/70, C12R1:93), C12N15/00, C12N15/00
CC Oligonucleotide M5206 for identifying HPV 52. FH Key
FT Location/Qualifiers
FT source 1..20
/organism='Artificial Sequence'
/organism='synthetic construct'
/mol_type='genomic DNA'
/db_xref='taxon:32630'

Query Match
Best Local Similarity 0.4%; Score 15.2; DB 1; Length 20;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3304 ATTTTATTTTATATATCC 3323
DB 20 ATTTTCATTTTATATGTC 1

RESULT 129
E13800
LOCUS PCR primer for discriminating genotype 2a of HCV (Hepatitis C
DEFINITION virus).
ACCESSION E13800
VERSION E13800.1 GI:3252568
KEYWORDS JP 1997234072-A/52.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Ono, T., Mukaide, M., Hikichi, K. and Mizogami, M.
TITLE NEW OLIGONUCLEOTIDE, PRIMER FOR DISCRIMINATION IN GENOTYPE OF
HEPATITIS C VIRUS COMPRISING THE SAME AND DISCRIMINATION IN
GENOTYPE OF HEPATITIS C VIRUS BY USING THE PRIMER
JOURNAL Patent: JP 1997234072-A 52 09-SEP-1997;
S R L:KK
COMMENT OS None
OC Artificial sequences.
PN JP 1997234072-A/52
PD 09-SEP-1997
PF 01-FEB-1996 JP 1996039875
PR 01-FEB-1995 JP 95P 35997, 30-DEC-1995 JP 95P 352511 PT
ONO TOMOYOSHI, MUKAIDE MASAKAZU, HIKICHI KAZUMASA, PI MIZOGAMI
MASAFUMI
PC C12N15/09, C07H21/04, C12Q1/68, C12Q1/70, (C12N15/09, C12R1:92); CC
strandedness: Single;
CC topology: Linear;
CC hypothetical: No;
CC anti-sense: No;
FH Key Location/Qualifiers
FH source 1..20
FT source 1..20
/organism='Artificial sequences' FT
misc_feature 1..20
/notes='Primer, OMW2a'.
FT Location/Qualifiers
FT 1..20
/organism='unidentified'
/mol_type='genomic DNA'
/db_xref='taxon:32644'

FEATURES
source
Query Match
0.4%; Score 15.2; DB 1; Length 20;

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Best Local Similarity 85.0%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3762 CAGATGGCTGGATCCCTCC 3781
DB 1 CACGTGGCTGGATCGCTCC 20

RESULT 130
E121071
LOCUS I21071
DEFINITION Sequence 42 from patent US 5518890.
ACCESSION I21071
VERSION I21071.1 GI:1601425
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Leonard, W.J., Noguchi, M. and McBride, O. Wesley.
TITLE Methods for diagnosis of XSCID and kits thereof
JOURNAL Patent: US 5518890-A 42 21-MAY-1996;
FEATURES Location/Qualifiers
source 1..20
/organism='unknown'
/mol_type='unassigned DNA'

Query Match
0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2093 AGTATCTGTTGAGCAGTTC 2112
DB 1 AGAATCTGTTGTTCCAGTTC 20

RESULT 131
E123988/c
LOCUS I23988
DEFINITION Sequence 17 from patent US 5541095.
ACCESSION I23988
VERSION I23988.1 GI:1603858
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 20)
AUTHORS Hirschberg, C.B., Orellana, A., Hashimoto, Y., Swiedler, S.J., Wei, Z.
and Ishihara, M.
TITLE Glycosaminoglycan specific sulfotransferases
JOURNAL Patent: US 5541095-A 17 30-JUL-1996;
FEATURES Location/Qualifiers
source 1..20
/organism='unknown'
/mol_type='unassigned DNA'

Query Match
0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1840 CCAAAAACAGGAACACTACAG 1859
DB 20 CCAGAAACAGGCACCACAG 1

RESULT 132
E205764/c
LOCUS AR205764
DEFINITION Sequence 2 from patent US 6369208.
ACCESSION AR205764
VERSION AR205764.1 GI:21503429
KEYWORDS
SOURCE Unknown.

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489 TTGACAGGAAACCCCATCCA 508
Ov

TITLE Method of designing addressable array for detection of nucleic acid
JOURNAL sequence differences using ligase detection reaction
 Patent: WO 0179548-A 6843 25-OCT-2001;
 CORNELL RESEARCH FOUNDATION, INC. (US)

FEATURES
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 Location/Qualifiers
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 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Hypothetical Probe Sequence"

Query Match
 Best Local Similarity 0.4%; Score 15.2; DB 1; Length 20;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1346 TGATTTGGGCAACAGCC 1365
 Db 1 TGATTTGGGCAACAGCC 20

RESULT 138
 AX544171/c
LOCUS AX544171 20 bp DNA linear PAT 23-NOV-2002
DEFINITION Sequence 45 from Patent WO02061109.
ACCESSION AX544171
VERSION AX544171.1 GI:25277733
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Spagnoli R., Achatter, T., Cauet, G., Degryse, E., Dumas, B.,
 Pompon, D. and Winter, J.
TITLE Yeast strains autonomously producing steroids
JOURNAL Patent: WO 02061109-A 45 08-AUG-2002;
 Aventis Pharma S.A. (FR)

FEATURES
 source
 Location/Qualifiers
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 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Oligonucleotide leu2D"

Query Match
 Best Local Similarity 0.4%; Score 15.2; DB 1; Length 20;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1558 GCATCTTCAATGGCTGTGCC 1577
 Db 20 GCATCTTCAATGGCTGTACC 1

RESULT 139
 AX742328/c
LOCUS AX742328 20 bp DNA linear PAT 12-MAY-2003
DEFINITION Sequence 131 from Patent EP1302550.
ACCESSION AX742328
VERSION AX742328.1 GI:30576296
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Lin, C.Y., Lin, R.W., You, C.M., Huang, H.H., Lee, B.H., Lee, H.H.,
 Lin, Y.J., Fan, C.C., Hsu, H.C., Shih, C.W., Yeh, C.H., Kao, Y.F.,
 Pan, C.L. and Chan, P.
TITLE Method and detector for identifying subtypes of human papilloma
 viruses
JOURNAL Patent: EP 1302550-A 131 16-APR-2003;
 King Car Food Industrial Co., Ltd. (TW)

FEATURES
 source
 Location/Qualifiers
 1..20
 /organism="synthetic construct"

/mol_type="genomic DNA"
 /db_xref="taxon:32630"
 /note="Oligonucleotide for Identifying HPV 33"

Query Match
 Best Local Similarity 0.4%; Score 15.2; DB 1; Length 20;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 3304 ATTTTATTTTATATATCC 3323
 Db 20 ATTTTCATTTTATATGTAC 1

RESULT 140
 AX742460/c
LOCUS AX742460 20 bp DNA linear PAT 12-MAY-2003
DEFINITION Sequence 263 from Patent EP1302550.
ACCESSION AX742460
VERSION AX742460.1 GI:30576428
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Lin, C.Y., Lin, R.W., You, C.M., Huang, H.H., Lee, B.H., Lee, H.H.,
 Lin, Y.J., Fan, C.C., Hsu, H.C., Shih, C.W., Yeh, C.H., Kao, Y.F.,
 Pan, C.L. and Chan, P.
TITLE Method and detector for identifying subtypes of human papilloma
 viruses
JOURNAL Patent: EP 1302550-A 263 16-APR-2003;
 King Car Food Industrial Co., Ltd. (TW)

FEATURES
 source
 Location/Qualifiers
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 /organism="synthetic construct"
 /mol_type="genomic DNA"
 /db_xref="taxon:32630"
 /note="Oligonucleotide for Identifying HPV 52"

Query Match
 Best Local Similarity 0.4%; Score 15.2; DB 1; Length 20;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 3304 ATTTTATTTTATATATCC 3323
 Db 20 ATTTTCATTTTATATGTGC 1

RESULT 141
 AX962807/c
LOCUS AX962807 20 bp DNA linear PAT 14-JAN-2004
DEFINITION Sequence 63 from Patent WO03104458.
ACCESSION AX962807
VERSION AX962807.1 GI:40881920
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Baker, B.F., Freier, S.M. and Dobie, K.W.
TITLE Antisense modulation of il-1 receptor-associated kinase-1
 expression
JOURNAL Patent: WO 03104458-A 63 18-DEC-2003;
 ISIS PHARMACEUTICALS, INC. (US)

FEATURES
 source
 Location/Qualifiers
 1..20
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Antisense Oligonucleotide"

Query Match
 Best Local Similarity 0.4%; Score 15.2; DB 1; Length 20;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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QY 460 AGAGCCTAAGCCACCTCTCT 479
Db 20 AGAGCCTAAGCGGCGCTCTCT 1

RESULT 142
AX962873 20 bp DNA linear PAT 14-JAN-2004
LOCUS
DEFINITION Sequence 129 from Patent WO03104458.
ACCESSION AX962873
VERSION AX962873.1 GI:40881996
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS Mammalia; Eutheraia; Primates; Catarrhini; Hominidae; Homo.
TITLE Baker, B.F., Freier, S.M. and Dobie, K.W.
JOURNAL Antisense modulation of il-1 receptor-associated kinase-1
FEATURES
source
1. .20
Location/Qualifiers
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 460 AGAGCCTAAGCCACCTCTCT 479
Db 1 AGAGCCTAAGCGGCGCTCTCT 20

RESULT 143
BD070557 20 bp DNA linear PAT 27-AUG-2002
LOCUS
DEFINITION Method for detecting mutated alleles.
ACCESSION BD070557
VERSION BD070557.1 GI:22616160
KEYWORDS JP 2001514504-A/4.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 20)
AUTHORS Wagner, C.
TITLE Method for detecting mutated alleles
JOURNAL Patent: JP 2001514504-A 4 11-SEP-2001;
CHRISTOPH WAGNER

COMMENT OS Artificial Sequence
PN JP 2001514504-A/4
PD 11-SEP-2001
PF 04-MAR-1998 JP 1998538071
PR 04-MAR-1997 DE 197 08 758.2
PI CHRISTOPH WAGNER
PC C1201/68
CC Description of the Artificial sequence: oligonucleotides FH
Key source 1. .20
Location/Qualifiers
FT /organism="Artificial Sequence".
FEATURES
source
1. .20
Location/Qualifiers
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 1.1e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3173 TTTTAAAGTCTGTCTCTTAC 3192
Db 1 TTTCAACTCTGTCTCTTCC 20

RESULT 144
AR023742 17 bp DNA linear PAT 05-DEC-1998
LOCUS
DEFINITION Sequence 24 from patent US 5795726.
ACCESSION AR023742
VERSION AR023742.1 GI:3977036
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE Unclassified.
AUTHORS 1 (bases 1 to 17)
TITLE Glucksman, M.Alexandra.
JOURNAL Methods for identifying compounds useful in treating type II
FEATURES
source
1. .17
Location/Qualifiers
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 402 CTGCAGGTGCTGGAT 416
Db 2 CTGCAGGTGCTGGAT 16

RESULT 145
AR036967 17 bp DNA linear PAT 29-SEP-1999
LOCUS
DEFINITION Sequence 21 from patent US 5800998.
ACCESSION AR036967
VERSION AR036967.1 GI:5954823
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE Unclassified.
AUTHORS 1 (bases 1 to 17)
TITLE Glucksman, M.Alexandra.
JOURNAL Assays for diagnosing type II diabetes in a subject
FEATURES
source
1. .17
Location/Qualifiers
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 402 CTGCAGGTGCTGGAT 416
Db 2 CTGCAGGTGCTGGAT 16

RESULT 146
BD256407 17 bp DNA linear PAT 17-JUL-2003
LOCUS
DEFINITION Regulation of repressor genes using nucleic acid molecules.
ACCESSION BD256407
VERSION BD256407.1 GI:33066177
KEYWORDS JP 2002541795-A/4200.
SOURCE unidentified
ORGANISM unidentified
FEATURES
source
1. .17
Location/Qualifiers
/organism="unassigned DNA"
/mol_type="unassigned DNA"

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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REFERENCE
AUTHORS      Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
TITLE        Regulation of repressor genes using nucleic acid molecules
JOURNAL      Patent: JP 2002541795-A 4200 10-DEC-2002;
              RIBOZYME PHARMACEUTICALS INC
COMMENT      OS Eukaryote
              PN JP 2002541795-A/4200
              PD 10-DEC-2002
              PF 11-APR-2000 JP 2000611654
              PR 12-APR-1999 US 60/129390
              PI LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
              C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
              C12P21/02,
              PC
              C12P21/02,C12P21/02//A61K31/711, (C12N5/10,C12R1:91), (C12P21/02, PC
              C12R1:91),
              PC (C12P21/02,C12R1:91), (C12P21/02,C12R1:91),C12N15/00,C12N5/00,
              PC A61K37/02,
              PC (C12N5/00,C12R1:91)
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              Key source 1..17
              Location/Qualifiers
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              FT Location/Qualifiers
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              /organism="unidentified"
              /mol_type="genomic DNA"
              /db_xref="taxon:32644"

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1896 CAGAATGACTTTGCT 1910
Db 15 CAGAATGACTTTGCT 1

RESULT 147
BD256855/c
LOCUS      17 bp DNA linear PAT 17-JUL-2003
DEFINITION Regulation of repressor genes using nucleic acid molecules.
ACCESSION BD256855
VERSION    BD256855.1 GI:33066625
KEYWORDS   JP 2002541795-A/4648.
SOURCE     unidentified
ORGANISM   unclassified.
REFERENCE  1 (bases 1 to 17)
AUTHORS    Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
TITLE      Regulation of repressor genes using nucleic acid molecules
JOURNAL    Patent: JP 2002541795-A 4648 10-DEC-2002;
              RIBOZYME PHARMACEUTICALS INC
COMMENT    OS Eukaryote
              PN JP 2002541795-A/4648
              PD 10-DEC-2002
              PF 11-APR-2000 JP 2000611654
              PR 12-APR-1999 US 60/129390
              PI LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
              C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
              C12P21/02,
              PC
              C12P21/02,C12P21/02//A61K31/711, (C12N5/10,C12R1:91), (C12P21/02, PC
              C12R1:91),
              PC (C12P21/02,C12R1:91), (C12P21/02,C12R1:91),C12N15/00,C12N5/00,
              PC A61K37/02,
              PC (C12N5/00,C12R1:91)
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              Key source 1..17
              Location/Qualifiers
              FT source /organism='Eukaryote'.
              FT Location/Qualifiers
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/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1896 CAGAATGACTTTGCT 1910
Db 15 CAGAATGACTTTGCT 1

RESULT 148
AX217411/c
LOCUS      17 bp RNA linear PAT 07-SEP-2001
DEFINITION Sequence 2853 from Patent WO0159103.
ACCESSION AX217411
VERSION    AX217411.1 GI:15527472
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Blatt,L., Mcswiggen,J. and Chowrira,B.M.
TITLE      Method and reagent for the modulation and diagnosis of cd20 and
              nogo gene expression
JOURNAL    Patent: WO 0159103-A 2853 16-AUG-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
              McSwiggen, James (US) ; Chowrira, Bharat M. (US)
              Location/Qualifiers
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              /organism="synthetic construct"
              /mol_type="unassigned RNA"
              /db_xref="taxon:32630"
              /note="Nucleic Acid"

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3797 CTGACAGGAGAACTA 3811
Db 16 CTGACAGGAGAACTA 2

RESULT 149
AX217777/c
LOCUS      17 bp RNA linear PAT 07-SEP-2001
DEFINITION Sequence 3219 from Patent WO0159103.
ACCESSION AX217777
VERSION    AX217777.1 GI:15527838
KEYWORDS   synthetic construct
SOURCE     synthetic construct
ORGANISM   other sequences; artificial sequences.
REFERENCE  1
AUTHORS    Blatt,L., Mcswiggen,J. and Chowrira,B.M.
TITLE      Method and reagent for the modulation and diagnosis of cd20 and
              nogo gene expression
JOURNAL    Patent: WO 0159103-A 3219 16-AUG-2001;
              RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
              McSwiggen, James (US) ; Chowrira, Bharat M. (US)
              Location/Qualifiers
              1..17
              /organism="synthetic construct"
              /mol_type="unassigned RNA"
              /db_xref="taxon:32630"
              /note="Nucleic Acid"

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      3797 CTGACAGGAGAACTA 3811
DB      17 CTGACAGGAGAACTA 3

RESULT 150
AX217778/c
LOCUS   AX217778      17 bp      RNA      linear      PAT 07-SEP-2001
DEFINITION   Sequence 3220 from Patent WO0159103.
ACCESSION   AX217778
VERSION     AX217778.1 GI:15527839
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Blatt,L., McSwiggen,J. and Chowrira,B.M.
TITLE       Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
JOURNAL     Patent: WO 0159103-A 3220 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES    Location/Qualifiers
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            /organism="synthetic construct"
            /mol_type="unassigned RNA"
            /db_xref="taxon:32630"
            /note="Nucleic Acid"

Query Match      0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 89;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      3797 CTGACAGGAGAACTA 3811
DB      15 CTGACAGGAGAACTA 1

RESULT 151
AR085548/c
LOCUS   AR085548      20 bp      DNA      linear      PAT 01-SEP-2000
DEFINITION   Sequence 26 from patent US 5981731.
ACCESSION   AR085548
VERSION     AR085548.1 GI:10012315
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unknown.
            Unclassified.
REFERENCE   1 (bases 1 to 20)
AUTHORS     Monia,B.P.
TITLE       Antisense oligonucleotide modulation of B-raf gene expression
JOURNAL     Patent: US 5981731-A 26 09-NOV-1999;
            Location/Qualifiers
FEATURES    source
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Query Match      0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1467 AACAAATGAGTGAG 1481
DB      20 AACAAATGAGTGAG 6

RESULT 152
AR216068/c
LOCUS   AR216068      20 bp      DNA      linear      PAT 25-SEP-2002
DEFINITION   Sequence 115 from patent US 6410518.
ACCESSION   AR216068
VERSION     AR216068.1 GI:123314356

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KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 20)
AUTHORS     Monia,B.P.
TITLE       Antisense oligonucleotide inhibition of raf gene expression
JOURNAL     Patent: US 6410518-A 115 25-JUN-2002;
            Location/Qualifiers
FEATURES    source
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            /organism="unknown"
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Query Match      0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1467 AACAAATGAGTGAG 1481
DB      20 AACAAATGAGTGAG 6

RESULT 153
AR226207
LOCUS   AR226207      20 bp      DNA      linear      PAT 20-DEC-2002
DEFINITION   Sequence 88 from patent US 6444466.
ACCESSION   AR226207
VERSION     AR226207.1 GI:27264361
KEYWORDS    .
SOURCE      Unknown.
ORGANISM    Unclassified.
REFERENCE   1 (bases 1 to 20)
AUTHORS     Ward,D.T. and Watt,A.T.
TITLE       Antisense modulation of helicase-moi expression
JOURNAL     Patent: US 6444466-A 88 03-SEP-2002;
            Location/Qualifiers
FEATURES    source
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Query Match      0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2331 ATCCATGAAGGTTTC 2345
DB      4 ATCCATGAAGGTTTC 18

Search completed: February 16, 2005, 09:21:47
Job time : 8 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: February 16, 2005, 09:23:05 ; Search time 15 Seconds
(without alignments)
3.633 Million cell updates/sec

Title: us-10-001-863-3

Perfect score: 3811

Sequence: 1 acaggccactgctgtctac.....tctcactgacaggagaacta 3811

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 0.5.

Searched: 352 seqs, 7150 residues

Total number of hits satisfying chosen parameters: 704

Minimum DB seq length: 8

Maximum DB seq length: 80

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 352 summaries

Database : rngdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query %	Match Length	ID	Description
1	50	1.3	50	1	Human leukocyte ge
2	30	0.8	30	1	399Reverse primer
3	30	0.8	30	1	Human TLR4 (Toll-1
4	29.4	0.8	31	1	399Forward primer
5	28.4	0.7	30	1	299Forward primer
6	27	0.7	27	1	299Reverse primer
7	26	0.7	26	1	Human TLR4 gene ex
8	24	0.6	24	1	Human Toll like re
9	24	0.6	24	1	Human TLR4 gene ex
10	24	0.6	24	1	Human TLR4 gene ex
11	24	0.6	24	1	Human TLR4 (Toll-1
12	24	0.6	24	1	Anti-CD14 monoclon
13	24	0.6	24	1	Sense PCR primer f
14	24	0.6	24	1	Human toll-like re
15	23	0.6	23	1	Human TLR4 gene ex
16	23	0.6	23	1	Human TLR4 gene ex
17	23	0.6	23	1	Human TLR4 gene ex
18	23	0.6	23	1	Human TLR4 gene ex
19	23	0.6	23	1	Antisense PCR prim
20	22	0.6	22	1	Human TLR4 gene ex
21	22	0.6	22	1	Human TLR4 gene ex
22	21.2	0.6	27	1	Mouse flt-1 VEGF r
23	21.2	0.6	27	1	Human flt1 VEGF re
24	21	0.6	21	1	Human TLR4 gene ex
25	21	0.6	21	1	Human TLR4 gene ex
26	21	0.6	21	1	Human TLR4 gene ex
27	21	0.6	21	1	Human Toll-like re
28	21	0.6	25	1	Human toll-like re
29	20.2	0.5	25	1	Probe for detectin
30	20	0.5	20	1	Human Toll like re
31	20	0.5	20	1	Human TLR4 gene ex
32	20	0.5	20	1	Human TLR4 gene ex
33	20	0.5	20	1	Human TLR4 gene ex

34	20	0.5	20	1	AAC84798	Human TLR4 gene ex
35	20	0.5	20	1	AAC84821	Human TLR4 gene ex
36	20	0.5	20	1	AAC84775	Human TLR4 gene am
37	20	0.5	20	1	AAC84785	Human TLR4 gene ex
38	20	0.5	20	1	AAC84792	Human TLR4 gene ex
39	20	0.5	20	1	AAC84799	Human TLR4 gene ex
40	20	0.5	20	1	AAC84825	Reverse primer der
41	20	0.5	20	1	AAC84812	Human TLR4 gene ex
42	20	0.5	20	1	AAC84774	Human TLR4 gene am
43	20	0.5	20	1	AAC84804	Human TLR4 gene ex
44	20	0.5	20	1	AAC84813	Human TLR4 gene ex
45	20	0.5	20	1	AAC84820	Human TLR4 gene ex
46	20	0.5	20	1	AAC84822	Human TLR4 gene ex
47	20	0.5	20	1	AAC84773	Human TLR4 gene am
48	20	0.5	20	1	AAC84781	Human TLR4 gene ex
49	20	0.5	20	1	AAC84795	Human TLR4 gene ex
50	20	0.5	20	1	AAC84824	Forward primer der
51	20	0.5	20	1	AAC84780	Human TLR4 gene ex
52	20	0.5	20	1	AAC84815	Human TLR4 gene ex
53	20	0.5	20	1	AAC84816	Human TLR4 gene ex
54	20	0.5	20	1	AAC84819	Human TLR4 gene ex
55	20	0.5	20	1	AAC84794	Human TLR4 gene ex
56	20	0.5	20	1	AAC84797	Human TLR4 gene ex
57	20	0.5	20	1	AAC84809	Human TLR4 gene ex
58	20	0.5	20	1	AAC84811	Human TLR4 gene ex
59	20	0.5	20	1	AAC84788	Human TLR4 gene ex
60	20	0.5	20	1	AAC84793	Human TLR4 gene ex
61	20	0.5	20	1	AAC84817	Human TLR4 gene ex
62	20	0.5	20	1	AAC84814	Human TLR4 gene ex
63	20	0.5	20	1	AAC84772	Human TLR4 gene am
64	20	0.5	20	1	AAL41015	Anti-CD14 monoclon
65	20	0.5	20	1	ADB39124	Human toll-like re
66	20	0.5	20	1	ADF17208	Human toll-like re
67	20	0.5	20	1	ADI53114	Human Toll-like re
68	20	0.5	20	1	ACG83590	Human Toll-like re
69	20	0.5	20	1	ACC83594	Human Toll-like re
70	20	0.5	20	1	ACC83606	Human Toll-like re
71	20	0.5	20	1	ACC83611	Human Toll-like re
72	20	0.5	20	1	ACC83584	Human Toll-like re
73	20	0.5	20	1	ACC83583	Human Toll-like re
74	20	0.5	20	1	ACC83592	Human Toll-like re
75	20	0.5	20	1	ACC83605	Human Toll-like re
76	20	0.5	20	1	ACC83608	Human Toll-like re
77	20	0.5	20	1	ACC83609	Human Toll-like re
78	20	0.5	20	1	ACC83596	Human Toll-like re
79	20	0.5	20	1	ACC83603	Human Toll-like re
80	20	0.5	20	1	ACC83588	Human Toll-like re
81	20	0.5	20	1	ACC83597	Human Toll-like re
82	20	0.5	20	1	ACC83602	Human Toll-like re
83	20	0.5	20	1	ACC83604	Human Toll-like re
84	20	0.5	20	1	ACC83581	Human Toll-like re
85	20	0.5	20	1	ACC83589	Human Toll-like re
86	20	0.5	20	1	ACC83582	Human Toll-like re
87	20	0.5	20	1	ACC83593	Human Toll-like re
88	20	0.5	20	1	ACC83607	Human Toll-like re
89	20	0.5	20	1	ACC83610	Human Toll-like re
90	20	0.5	20	1	ACC83613	Human Toll-like re
91	20	0.5	20	1	ACC83585	Human Toll-like re
92	20	0.5	20	1	ACC83598	Human Toll-like re
93	20	0.5	20	1	ACC83586	Human Toll-like re
94	20	0.5	20	1	ACC83587	Human Toll-like re
95	20	0.5	20	1	ACC83591	Human Toll-like re
96	20	0.5	20	1	ACC83595	Human Toll-like re
97	20	0.5	20	1	ACC83612	Human Toll-like re
98	19.2	0.5	24	1	AAI69670	Hepatitis E virus
99	19	0.5	19	1	AAC84782	Human TLR4 gene ex
100	19	0.5	19	1	ADB39125	Human toll-like re
101	19	0.5	19	1	ADI53115	Human Toll-like re
102	18.8	0.5	24	1	ACC74142	Reverse primer for
103	18.4	0.5	20	1	ADF17210	Human toll-like re
104	18.2	0.5	24	1	ADP98293	C. albicans specif
105	18	0.5	18	1	AAC84790	Human TLR4 gene ex
106	17.4	0.5	22	1	AAV51439	Zea mays genome fo

C 107	17.2	0.5	22	1	ABK88343	Synthetic TLR4 PCR	C 180	15.8	0.4	20	1	ADH67703	Human glucocorticoid
C 108	17.2	0.5	22	1	ADG17647	Mouse toll-like receptor	C 181	15.8	0.4	20	1	ADI79725	Human HMG-CoA reductase
C 109	17	0.4	20	1	AAZ21943	Human B-raf kinase	C 182	15.8	0.4	20	1	ADI79528	Human HMG-CoA reductase
C 110	17	0.4	20	1	AD444802	Human B-raf kinase	C 183	15.8	0.4	20	1	ADJ60803	Oligonucleotide as primer
C 111	17	0.4	20	1	AD09796	Human b-raf kinase	C 184	15.8	0.4	20	1	ADJ59719	Oligonucleotide as primer
C 112	17	0.4	20	1	AD421815	Antisense oligonucleotide	C 185	15.8	0.4	20	1	ADJ54227	Human B7-1 DNA antisense
C 113	16.8	0.4	20	1	AAV37060	PCR primer for anti-CD4	C 186	15.8	0.4	20	1	ADL23352	Primer #2 for anti-CD4
C 114	16.8	0.4	20	1	ACC74158	Forward primer TLR4	C 187	15.8	0.4	20	1	ADL27792	Human Fas cDNA, antisense
C 115	16.8	0.4	20	1	ADD93829	Mouse AF05972 (mAF)	C 188	15.8	0.4	20	1	ADM53564	Human Fas antisense
C 116	16.8	0.4	20	1	AD287635	Human oligonucleotide	C 189	15.8	0.4	20	1	ADO45209	Human oligonucleotide
C 117	16.8	0.4	20	1	ABD23868	Human myosin X-der	C 190	15.8	0.4	20	1	ADO46292	Human oligonucleotide
C 118	16.8	0.4	20	1	ADH64648	Human glucocorticoid	C 191	15.8	0.4	20	1	ADO51802	Human ADAM15 target
C 119	16.8	0.4	20	1	ADH66115	Human glucocorticoid	C 192	15.8	0.4	20	1	ADO51767	Human cytokine-inducible
C 120	16.8	0.4	20	1	ADH67804	Human glucocorticoid	C 193	15.8	0.4	20	1	ADN30059	Human cytokine-inducible
C 121	16.8	0.4	21	1	AAZ25870	Human polymorphic primer	C 194	15.8	0.4	20	1	ADP11285	Set 1 right PCR primer
C 122	16.4	0.4	20	1	AAV80034	Primer intU2 for S	C 195	15.8	0.4	20	1	ADQ88907	Breast cancer associated
C 123	16.4	0.4	20	1	ADT13876	Human helicase-moi	C 196	15.8	0.4	20	1	ADQ29449	Human TNF alpha antisense
C 124	16.4	0.4	20	1	ADH60081	Human helicase-moi	C 197	15.8	0.4	20	1	ADQ29465	Antisense oligonucleotide
C 125	16.4	0.4	20	1	ADH65626	Human glucocorticoid	C 198	15.8	0.4	21	1	AAZ11675	Oligo specific for mouse
C 126	16.4	0.4	20	1	ADH67258	Human glucocorticoid	C 199	15.8	0.4	21	1	AAV72092	Mouse MSP PCR primer
C 127	16.4	0.4	20	1	AD055876	Human NIMA-related	C 200	15.8	0.4	21	1	AAZ22336	Human COL9A2 PCR primer
C 128	16.4	0.4	20	1	AD055815	Human NIMA-related	C 201	15.8	0.4	21	1	AAH43192	NOV72 PCR primer, pollen
C 129	16.4	0.4	21	1	ADN14299	PCR primer used to	C 202	15.6	0.4	20	1	AAQ90158	Human c-myc hammer
C 130	16.2	0.4	21	1	AAV10575	Cbeta-specific primer	C 203	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 131	16.2	0.4	21	1	AAV08680	Primer ATP/17FB for	C 204	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 132	16.2	0.4	21	1	AAV55550	TCR Valpha 2 subfa	C 205	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 133	16.2	0.4	21	1	AAV38308	Human A11 regulator	C 206	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 134	16.2	0.4	21	1	AAV61308	Human ACE, AGR and	C 207	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 135	16.2	0.4	21	1	AAV60173	Human ATM gene exo	C 208	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 136	16.2	0.4	21	1	AB050593	Dipeptide aminopep	C 209	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 137	16.2	0.4	21	1	ADK00166	Murine pmn sequenc	C 210	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 138	16	0.4	19	1	ADZ27067	Stearoyl-CoA desat	C 211	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 139	16	0.4	19	1	ADZ27357	Stearoyl-CoA desat	C 212	15.4	0.4	17	1	AAAT81553	Single nucleotide
C 140	16	0.4	20	1	ADZ77163	Batten disease gen	C 213	15.4	0.4	18	1	AAAT81553	Single nucleotide
C 141	16	0.4	20	1	ABZ65155	Mouse casein kinase	C 214	15.4	0.4	18	1	AAAT81553	Single nucleotide
C 142	15.8	0.4	19	1	ACQ09330	Human biol-like re	C 215	15.4	0.4	18	1	AAAT81553	Single nucleotide
C 143	15.8	0.4	19	1	ACQ70795	Human Toll-like re	C 216	15.4	0.4	18	1	AAAT81553	Single nucleotide
C 144	15.8	0.4	19	1	ADZ78588	Endogenous caroten	C 217	15.4	0.4	18	1	AAAT81553	Single nucleotide
C 145	15.8	0.4	19	1	ADZ75738	Antisense siRNA tha	C 218	15.4	0.4	18	1	AAAT81553	Single nucleotide
C 146	15.8	0.4	19	1	ADZ75553	Sense siRNA that do	C 219	15.4	0.4	18	1	AAAT81553	Single nucleotide
C 147	15.8	0.4	19	1	ADG34714	Human TNF siRNA oli	C 220	15.4	0.4	19	1	AAAT81553	Single nucleotide
C 148	15.8	0.4	19	1	ADG34802	Human TNF siRNA oli	C 221	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 149	15.8	0.4	19	1	ADZ78541	Human apolipoprote	C 222	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 150	15.8	0.4	19	1	ADZ75923	Human apolipoprote	C 223	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 151	15.8	0.4	20	1	AAV59720	Modified oligonucle	C 224	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 152	15.8	0.4	20	1	AAV52722	DCOH (PCBD) gene e	C 225	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 153	15.8	0.4	20	1	AAV48008	Human B7-1 targett	C 226	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 154	15.8	0.4	20	1	AAZ37657	Human mdm2 phospho	C 227	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 155	15.8	0.4	20	1	AAZ36672	PCR primer for mar	C 228	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 156	15.8	0.4	20	1	AAZ41139	Human TNFalpha ant	C 229	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 157	15.8	0.4	20	1	AAZ32850	Human B7-1 mRNA an	C 230	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 158	15.8	0.4	20	1	AAZ32850	Human mdm2 phospho	C 231	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 159	15.8	0.4	20	1	AAZ32850	Human mdm2 antisen	C 232	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 160	15.8	0.4	20	1	AAZ32850	Human Fas target o	C 233	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 161	15.8	0.4	20	1	ADZ79736	Tumour necrosis fa	C 234	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 162	15.8	0.4	20	1	ADZ21622	Human mdm2 antisen	C 235	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 163	15.8	0.4	20	1	ADZ21622	Human B7-1 mRNA ta	C 236	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 164	15.8	0.4	20	1	ADZ21622	Human oligonucleot	C 237	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 165	15.8	0.4	20	1	ADZ21622	Human oligonucleot	C 238	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 166	15.8	0.4	20	1	ADZ21622	Human oligonucleot	C 239	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 167	15.8	0.4	20	1	ADZ21622	Human PDE4A oligon	C 240	15.4	0.4	20	1	AAAT81553	Single nucleotide
C 168	15.8	0.4	20	1	ADZ21622	Human sotaxin olig	C 241	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 169	15.8	0.4	20	1	ADZ21622	Toxicologically re	C 242	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 170	15.8	0.4	20	1	ADZ21622	M. gallisepticum m	C 243	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 171	15.8	0.4	20	1	ADZ21622	Plant retroelement	C 244	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 172	15.8	0.4	20	1	ADZ21622	H93087-derived oli	C 245	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 173	15.8	0.4	20	1	ADZ21622	Human PDE4A-deri	C 246	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 174	15.8	0.4	20	1	ADZ21622	Human stannocalci	C 247	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 175	15.8	0.4	20	1	ADZ21622	Human cotaxin-deri	C 248	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 176	15.8	0.4	20	1	ADZ21622	H87536-derived oli	C 249	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 177	15.8	0.4	20	1	ADZ21622	Human Vbeta gene r	C 250	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 178	15.8	0.4	20	1	ADZ21622	Human glucocorticoid	C 251	15.2	0.4	20	1	AAAT81553	Single nucleotide
C 179	15.8	0.4	20	1	ADZ21622	Human glucocorticoid	C 252	15.2	0.4	20	1	AAAT81553	Single nucleotide

C 253	15.2	0.4	20	1	AAF60191	Human ATM gene exo
C 254	15.2	0.4	20	1	AAC92601	Human nucleolin ph
C 255	15.2	0.4	20	1	AKG99798	Mouse RAIDO antisense
C 256	15.2	0.4	20	1	ABX14629	Human lipoprotein
C 257	15.2	0.4	20	1	ABT11882	Autonomous sterol
C 258	15.2	0.4	20	1	ABT11882	Capture oligonucleotide
C 259	15.2	0.4	20	1	ACF33763	Human CREB phospho
C 260	15.2	0.4	20	1	ABD99938	Vitamin D nuclear
C 261	15.2	0.4	20	1	ABD99938	Antisense oligonucleotide
C 262	15.2	0.4	20	1	ADC83301	Human papillomavirus
C 263	15.2	0.4	20	1	ADC84033	Human B7-1 target
C 264	15.2	0.4	20	1	ADE27866	Human B7-1 target
C 265	15.2	0.4	20	1	ADE27866	Human B7-1 target
C 266	15.2	0.4	20	1	ADF43774	HPV 33 detecting p
C 267	15.2	0.4	20	1	ADF43774	HPV 52 detecting p
C 268	15.2	0.4	20	1	ADP88065	Single nucleotide
C 269	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 270	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 271	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
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C 308	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
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C 310	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
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C 312	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 313	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 314	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 315	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 316	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 317	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 318	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 319	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 320	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 321	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 322	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 323	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 324	15.2	0.4	20	1	ABZ94003	Human oligonucleotide
C 325	15.2	0.4	20	1	ABZ94003	Human oligonucleotide

ALIGNMENTS

RESULT 1	
ABZ02491	
ID	ABZ02491 standard; DNA; 50 BP.
XX	
AC	ABZ02491;
XX	
DT	09-JAN-2003 (first entry)
XX	
DE	Human leukocyte gene expression profiling probe SEQ ID NO 2482.
XX	
KW	T7; leukocyte; gene expression profiling; allograft rejection;
KW	atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW	rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW	ss.
XX	
OS	Homo sapiens.
XX	
PN	WO200257414-A2.
XX	
PD	25-JUL-2002.
XX	
PF	22-OCT-2001; 2001WO-US047856.
XX	
PR	20-OCT-2000; 2000US-0241994P.
PR	08-JUN-2001; 2001US-0296764P.
XX	
XX	(BIOC-) BIOCARDIA INC.
XX	
PI	Wohlgenuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI	Ly N, Woodward R, Quattermost T, Johnson F;
XX	
DR	WPI; 2002-636525/68.
XX	
PT	New system for leukocyte expression profiling, diagnosing a disease, or
PT	monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT	or congestive heart failure, comprises diagnostic oligonucleotides.
XX	
PS	Claim 1; Page 406; Opp; English.
XX	
CC	The invention relates to a system for detecting gene expression, which
CC	comprises one or two isolated DNA molecules that detect expression of a

CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ0010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 13 A; 6 C; 16 G; 15 T; 0 U; 0 Other;

Query Match 1.3%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 0.15;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3724 TGATGTTGACGACCTATGATCTATTAGGAGACACAGATGCTGGG 3773
|||||
DB 1 TGATGTTGACGACCTATGATCTATTAGGAGACACAGATGCTGGG 50

RESULT 2
AAC84833/c
ID AAC84833 standard; DNA; 30 BP.
XX
AC AAC84833;
XX
DT 20-APR-2001 (first entry)
XX
DE 399Reverse primer for RFLP assay of human TLR4 gene.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systemic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 2; Page 42; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced

CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS)
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. The present sequence represents a reverse primer
CC used to detect a nucleotide change at codon 399 of the human TLR4 gene,
CC used in a PCR based RFLP assay to genotype patients for TLR4
XX
SQ Sequence 30 BP; 10 A; 4 C; 9 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 12;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1706 AGCATTAACTCACTCTCCAGTCTTCAGGT 1735
|||||
DB 30 AGCATTAACTCACTCTCCAGTCTTCAGGT 1

RESULT 3
AAD46775/c
ID AAD46775 standard; DNA; 30 BP.
XX
AC AAD46775;
XX
DT 27-JAN-2003 (first entry)
XX
DE Human TLR4 (Toll-like receptor) DNA specific RT-PCR primer #2.
XX
KW Human; TLR; Toll-like receptor; dendritic cell associated protein;
KW autoimmune disorder; psoriasis; inflammatory bowel disease; asthma;
KW multiple sclerosis; lupus erythematosus; rheumatoid arthritis; cancer;
KW type I diabetes; infectious disease; gene therapy; immunosuppressive;
KW antiinflammatory; neuroprotective; dermatological; antibacterial;
KW virucide; cytostatic; reverse transcription; RT; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200274921-A2.
XX
PD 26-SEP-2002.
XX
PF 19-MAR-2002; 2002WO-US008122.
XX
PR 19-MAR-2001; 2001US-0276474P.
XX
PA (CELL-) CELLULAR GENOMICS INC.
XX
PI Velleca MA, Mellman I;
XX
DR WPI; 2002-759890/82.
XX
PT Isolating dendritic cell associated protein using an agent which alters
PT its expression or activity, useful in diagnosing and treating disorders
PT with altered expression or activity of the protein, such as autoimmune
PT disease and cancer.
XX
PS Example 9; Page 56; 73pp; English.
XX
CC The invention relates to a method for generating a dendritic cell
CC associated protein. The invention also relates to compositions and
CC methods for generating an antibody against a dendritic cell associated
CC protein. The methods and compositions are useful for diagnosing and
CC treating diseases associated with altered dendritic cell activity such as
CC autoimmune disorders, e.g. psoriasis, inflammatory bowel disease, asthma,
CC multiple sclerosis, lupus erythematosus, rheumatoid arthritis or type I
CC diabetes, and cancer or infectious disease. The invention is also used in
CC gene therapy. The present sequence is a RT (reverse transcription)-PCR
CC primer used for amplifying human TLR (Toll-like receptor) DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 30 BP; 9 A; 8 C; 10 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 30; DB 1; Length 30;
 Best Local Similarity 100.0%; Pred. No. 12;
 Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2701 CCTCTGAGGCAATTCCTTGGCCAGCTGGGT 2730
 |||||
 DB 30 CCTCTGAGGCAATTCCTTGGCCAGCTGGGT 1

RESULT 4
 AAC84832
 ID AAC84832 standard; DNA; 31 BP.
 XX
 AC AAC84832;
 XX
 DT 20-APR-2001 (first entry)
 XX
 DE 399Forward primer for RFLP assay of human TLR4 gene.
 XX
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200077204-A1.
 XX
 PD 21-DEC-2000.
 XX
 PF 08-JUN-2000; 2000WO-US015723.
 XX
 PR 10-JUN-1999; 99US-00329515.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 PA (LORENZ) LORENZ E.
 XX
 PI Lorenz E, Schwartz DA, Schutte BC;
 XX
 DR WPI; 2001-061872/07.
 XX
 PT Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX
 PS Claim 35; Page 42; 97pp; English.
 XX
 CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. The present sequence represents a forward primer
 CC used to detect a nucleotide change at codon 399 of the human TLR4 gene,
 CC used in a PCR based RFLP assay to genotype patients for TLR4

Query Match 0.8%; Score 29.4; DB 1; Length 31;
 Best Local Similarity 96.7%; Pred. No. 18;
 Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1329 GGTTCCTCTCTCAAGTGATTTGGGACAA 1359
 |||||
 DB 1 GGTTCCTCTCTCAAGTGATTTGGGAGAA 31

RESULT 5
 AAC84830
 ID AAC84830 standard; DNA; 30 BP.
 XX
 AC AAC84830;
 XX
 DT 20-APR-2001 (first entry)
 XX
 DE 299Forward primer for RFLP assay of human TLR4 gene.
 XX
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200077204-A1.
 XX
 PD 21-DEC-2000.
 XX
 PF 08-JUN-2000; 2000WO-US015723.
 XX
 PR 10-JUN-1999; 99US-00329515.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 PA (LORENZ) LORENZ E.
 XX
 PI Lorenz E, Schwartz DA, Schutte BC;
 XX
 DR WPI; 2001-061872/07.
 XX
 PT Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX
 PS Claim 33; Page 42; 97pp; English.
 XX
 CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. The present sequence represents a forward primer
 CC used to detect a nucleotide change at codon 299 of the human TLR4 gene,
 CC used in a PCR based RFLP assay to genotype patients for TLR4

Query Match 0.7%; Score 28.4; DB 1; Length 30;
 Best Local Similarity 96.7%; Pred. No. 18;
 Matches 29; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1329 GGTTCCTCTCTCAAGTGATTTGGGACAA 1359
 |||||
 DB 1 GGTTCCTCTCTCAAGTGATTTGGGAGAA 31

RESULT 5
 AAC84830
 ID AAC84830 standard; DNA; 30 BP.
 XX
 AC AAC84830;
 XX
 DT 20-APR-2001 (first entry)
 XX
 DE 299Forward primer for RFLP assay of human TLR4 gene.
 XX
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200077204-A1.
 XX
 PD 21-DEC-2000.
 XX
 PF 08-JUN-2000; 2000WO-US015723.
 XX
 PR 10-JUN-1999; 99US-00329515.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 PA (LORENZ) LORENZ E.
 XX
 PI Lorenz E, Schwartz DA, Schutte BC;
 XX
 DR WPI; 2001-061872/07.
 XX
 PT Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX
 PS Claim 33; Page 42; 97pp; English.
 XX
 CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. The present sequence represents a forward primer
 CC used to detect a nucleotide change at codon 299 of the human TLR4 gene,
 CC used in a PCR based RFLP assay to genotype patients for TLR4

QY 1030 GATTAGCATCTAGACTACTACTCTCGATG 1059
|||||
Db 1 GATTAGCATCTAGACTACTACTCTCCATG 30
|||||

RESULT 6
AAC84831/c
ID AAC84831 standard; DNA; 27 BP.
XX AC
XX AAC84831;
XX
XX 20-APR-2001 (first entry)
XX
XX 299Reverse primer for RFLP assay of human TLR4 gene.
XX
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; RFLP; ss.
XX
XX Homo sapiens.
XX
XX WO200077204-A1.
XX
XX 21-DEC-2000.
XX
XX 08-JUN-2000; 2000WO-US015723.
XX
XX 10-JUN-1999; 99US-00329515.
XX
XX (IOWA) UNIV IOWA RES FOUND.
PA
PA (LORENZ) LORENZ E.
XX
XX Lorenz E, Schwartz DA, Schutte BC;
XX
XX WPI; 2001-061872/07.
XX
XX Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
XX Example 2; Page 42; 97pp; English.

XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. The present sequence represents a reverse primer
CC used to detect a nucleotide change at codon 299 of the human TLR4 gene,
CC used in a PCR based RFLP assay to genotype patients for TLR4
XX
XX Sequence 27 BP; 10 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 21;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1252 GTGGGAATGCTTTTTCAGAAGTTGATC 1278
|||||

Db 27 GTGGGAATGCTTTTTCAGAAGTTGATC 1
|||||

RESULT 7
AAC84807/c
ID AAC84807 standard; DNA; 26 BP.
XX AC
XX AAC84807;
XX
XX 20-APR-2001 (first entry)
XX
XX Human TLR4 gene exon 4 amplifying reverse primer.
XX
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200077204-A1.
XX
XX 21-DEC-2000.
XX
XX 08-JUN-2000; 2000WO-US015723.
XX
XX 10-JUN-1999; 99US-00329515.
XX
XX (IOWA) UNIV IOWA RES FOUND.
PA
PA (LORENZ) LORENZ E.
XX
XX Lorenz E, Schwartz DA, Schutte BC;
XX
XX WPI; 2001-061872/07.
XX
XX Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
XX Example 1; Page 31; 97pp; English.

XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
XX Sequence 26 BP; 8 A; 6 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 0.7%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 25;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1117 TGACTATTGAAAGGGTAAAGACTTT 1142
|||||

Db 26 TGACTATTGAAAGGGTAAAGACTTT 1
|||||

```

RESULT 8
AAI71236/c
ID AAI71236 standard; DNA; 24 BP.
XX
AC AAI71236;
XX
DT 23-JAN-2002 (first entry)
XX
DE Human Toll like receptor 4 PCR antisense primer 1 SEQ ID NO:9.
XX
KW Human; Toll like receptor; TLR; CD14; antibody; anti-CD14 antibody;
KW TLR/CD14 binding inhibitor; antibacterial; immunosuppressive;
KW antipyretic; hypertensive; immunostimulant; haemostatic; vasotropic;
KW bacterial infection; sepsis; fever; hypotension; leukopenia;
KW thrombopenia; shock; multi-organ failure; ss.
XX
OS Homo sapiens.
XX
FN WO200172993-A1.
XX
PD 04-OCT-2001.
XX
PF 02-APR-2001; 2001WO-JP002869.
XX
PR 31-MAR-2000; 2000JP-00099617.
XX
PR 22-NOV-2000; 2000JP-00356719.
XX
PR 28-MAR-2001; 2001US-00806158.
XX
PA (MOCH ) MOCHIDA PHARM CO LTD.
XX
PI Furusako S, Mori S, Shirakawa K, Takahashi T;
XX
WPI; 2001-616487/71.
XX
PT Anti-CD14 antibody or its fragment inhibiting the binding of CD14 to Toll
PT -like receptor, applicable in drugs for treating bacterial infection as
PT well as sepsis, fever, hypotension, leukopenia, thrombopenia and shock.
XX
PS Example 2; Page 170; 202pp; Japanese.
XX
CC The present invention describes an anti-CD14 antibody, which has a
CC function of inhibiting the binding of CD14 to the Toll-like receptor
CC (TLR). The anti-CD14 antibody can specifically recognise the epitope
CC containing the domain from numbers 269-315 in human CD14 of the sequence
CC in AAG68127 or a part of it. Anti-CD14 antibody has antibacterial,
CC immunosuppressive, antipyretic, hypertensive, immunostimulant,
CC haemostatic and vasotropic activities. The antibody together with other
CC polypeptides are applicable in drugs for treating bacterial infection as
CC well as sepsis, fever, hypotension, leukopenia, thrombopenia, shock and
CC multi-organ failure. AAG68127 to AAG68137 and AAI71230 to AAI71295
CC represent sequences used in the exemplification of the present invention
XX
SQ Sequence 24 BP; 11 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1137 GACTTTTCTTATAATTCGGATGG 1160
DB 24 GACTTTTCTTATAATTCGGATGG 1
RESULT 9
AAC84805/c
ID AAC84805 standard; DNA; 24 BP.
XX
AC AAC84805;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.

```

```

XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
FN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA ) UNIV IOWA RES FOUND.
XX (LORE/) LORENZ E.
XX Lorenz E, Schwartz DA, Schutte BC;
XX WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
XX amplifying the exons of human TLR4 gene
XX
SQ Sequence 24 BP; 6 A; 5 C; 4 G; 9 T; 0 U; 0 Other;
Query Match 0.6%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 37;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 836 AGAATAGGCTTCATAGCTGAC 859
DB 24 AGAATAGGCTTCATAGCTGAC 1
RESULT 10
AAC84810/c
ID AAC84810 standard; DNA; 24 BP.
XX
AC AAC84810;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;

```

KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
 OS Homo sapiens.
 XX WO200077204-A1.
 PN 21-DEC-2000.
 XX 08-JUN-2000; 2000WO-US015723.
 PF 10-JUN-1999; 99US-00329515.
 XX (IOWA) UNIV IOWA RES FOUND.
 PA (LORENZ) LORENZ E.
 XX Lorenz E, Schwartz DA, Schutte BC;
 XX WPI; 2001-061872/07.
 DR Identifying humans at risk of, or having indication associated with
 XX altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX Example 1; Page 31; 97pp; English.
 PS The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 XX methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systemic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene
 XX
 SQ Sequence 24 BP; 8 A; 5 C; 2 G; 9 T; 0 U; 0 Other;
 Query Match 0.6%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 37;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1464 TTGAACAATGAGTGAGTTTCA 1487
 DB 24 TTGAACAATGAGTGAGTTTCA 1
 RESULT 11
 AAD46774
 ID AAD46774 standard; DNA; 24 BP.
 XX AAD46774;
 AC AAD46774;
 XX 27-JAN-2003 (first entry)
 DT Human TLR4 (Toll-like receptor) DNA specific RT-PCR primer #1.
 XX Human; TLR; Toll-like receptor; dendritic cell associated protein;
 KW autoimmune disorder; psoriasis; inflammatory bowel disease; asthma;
 KW multiple sclerosis; lupus erythematosus; rheumatoid arthritis; cancer;
 KW type I diabetes; infectious disease; gene therapy; immunosuppressive;
 KW antiinflammatory; neuroprotective; dermatological; antibacterial;

KW virucide; cytostatic; reverse transcription; RT; PCR; primer; ss.
 XX Homo sapiens.
 OS WO200274921-A2.
 PN 26-SEP-2002.
 XX 19-MAR-2002; 2002WO-US008122.
 PF 19-MAR-2001; 2001US-0276474P.
 XX (CELL-) CELLULAR GENOMICS INC.
 PA Velleca MA, Mellman I;
 PI WPI; 2002-759890/82.
 DR Isolating dendritic cell associated protein using an agent which alters
 XX its expression or activity, useful in diagnosing and treating disorders
 PT with altered expression or activity of the protein, such as autoimmune
 PT disease and cancer.
 XX Example 9; Page 56; 73pp; English.
 PS The invention relates to a method for generating a dendritic cell
 CC associated protein. The invention also relates to compositions and
 CC methods for generating an antibody against a dendritic cell associated
 CC protein. The methods and compositions are useful for diagnosing and
 CC treating diseases associated with altered dendritic cell activity such as
 CC autoimmune disorders, e.g. psoriasis, inflammatory bowel disease, asthma,
 CC multiple sclerosis, lupus erythematosus, rheumatoid arthritis or type I
 CC diabetes, and cancer or infectious disease. The invention is also used in
 CC gene therapy. The present sequence is a RT (reverse transcription)-PCR
 CC primer used for amplifying human TLR (toll-like receptor) DNA. This
 CC sequence is used to illustrate the method of the invention
 XX
 SQ Sequence 24 BP; 4 A; 6 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.6%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 37;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2442 CTGAGCAGTCGTCGTGATCATC 2465
 DB 1 CTGAGCAGTCGTCGTGATCATC 24
 RESULT 12
 AAL41014/c
 ID AAL41014 standard; DNA; 24 BP.
 XX AAL41014;
 AC AAL41014;
 XX 11-OCT-2002 (first entry)
 DT Anti-CD14 monoclonal antibody related oligonucleotide #2.
 DE Immunosuppressive; antibacterial; anti-CD14 antibody; epitope; sepsis;
 XX human CD14; ds.
 KW Unidentified.
 OS WO200242333-A1.
 PN 30-MAY-2002.
 XX 28-SEP-2001; 2001WO-JP008563.
 PF 22-NOV-2000; 2000JP-00356719.
 XX (MOCH) MOCHIDA PHARM CO LTD.
 PA

PI Purusako S, Shirakawa K, Mori S;
 DR WPI; 2002-454920/48.
 XX
 XX Anti-CD14 monoclonal antibody which inhibits CD14/T lymphocyte receptor
 PT binding by specifically recognizing epitope in human CD14 domain to
 PT prevent interaction and suppress cell activation, useful for treating
 PT sepsis.
 XX
 XX Example 2; Page 45; 156pp; Japanese.
 PS
 XX The invention relates to an anti-CD14 antibody which can specifically
 CC recognise an epitope containing a part of a domain with not less than 8
 CC amino acids in human CD14 in the region from positions 269-315 in a fully
 CC defined sequence of 356 amino acids as given in the specification. The
 CC antibody is useful in drug compositions for treating sepsis and for
 CC screening remedies for sepsis. This polynucleotide sequence represents
 CC anti-CD14 related oligonucleotide of the invention
 XX
 SQ Sequence 24 BP; 11 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 37;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1137 GACCTTTCTTATAATTTCGGATGG 1160
 DB 24 GACCTTTCTTATAATTTCGGATGG 1
 RESULT 13
 ACC43816
 ID ACC43816 standard; DNA; 24 BP.
 XX
 AC ACC43816;
 XX
 DT 11-AUG-2003 (first entry)
 XX
 DE Sense PCR primer for human toll-like receptor 4 (TLR4) cDNA.
 XX
 KW Toll-like receptor; TLR; central nervous system; CNS;
 KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
 KW Pick's disease; multiple sclerosis; stroke; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1288226-A1.
 XX
 PD 05-MAR-2003.
 XX
 PF 03-SEP-2001; 2001EP-00203325.
 XX
 PR 03-SEP-2001; 2001EP-00203325.
 XX
 PA (NEDE) NEDERLANDSE ORG TORGEPAST.
 XX
 PI Van Noort JM;
 XX
 DR WPI; 2003-344752/33.
 XX
 PT Modifying the expression of Toll-like receptors (TLR), useful for
 PT influencing neurodegeneration or neuroprotection in the human CNS,
 PT comprises contacting CNS cells with a TLR-expression modifying agent,
 PT e.g. alpha B-crystallin.
 XX
 PS Disclosure; Page 7; 20pp; English.
 XX
 CC The specification describes a method of modifying the expression of at
 CC toll-like receptor (TLR) in cells of the human central nervous system
 CC (CNS). The method comprises contacting the cells with a TLR-expression
 CC modifying agent, selected from substances that are endogenous to the
 CC human CNS and its parts or variants, that is capable of altering the
 CC expression of a TLR in the cells. The TLR-expression modifying agent is

CC useful for preparing a pharmaceutical composition for retarding or
 CC inhibiting a neurodegenerative process and/or stimulating a
 CC neuroprotective process in a human being afflicted by a neurodegenerative
 CC disorder such as Alzheimer's disease, Parkinson's disease, Pick's
 CC disease, multiple sclerosis or stroke. The present PCR primer was used to
 CC amplify cDNA encoding human TLR1. The primer was used to determine the
 CC amount of TLR present in human glia cells in a semi-quantitative RT-PCR
 XX
 SQ Sequence 24 BP; 8 A; 2 C; 10 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 37;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2218 AGGACTGGGTAAAGGAATGAGCTAG 2241
 DB 1 AGGACTGGGTAAAGGAATGAGCTAG 24
 RESULT 14
 ADR83260
 ID ADR83260 standard; RNA; 24 BP.
 XX
 AC ADR83260;
 XX
 DT 02-DEC-2004 (first entry)
 XX
 DE Human toll-like receptor 4 miRNA target region.
 XX
 KW human; ss; miRNA; microRNA; ontogenesis; cell therapy; cancer;
 KW immune disease; nerve disorder; amyotrophic lateral sclerosis;
 KW Parkinson's disease; Alzheimer's disease; inflammatory disease;
 KW siRNA silencing precursor; cytostatic; immunosuppressive; neurotropic;
 KW neuroprotective; antiinflammatory; immunotherapy; toll-like receptor 4.
 XX
 OS Homo sapiens.
 XX
 PN WO2004076622-A2.
 XX
 PD 10-SEP-2004.
 XX
 PF 10-FEB-2004; 2004WO-JP001433.
 XX
 PR 10-FEB-2003; 2003US-0445829P.
 XX
 PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
 XX
 PI Taira K, Kawasaki H;
 XX
 DR WPI; 2004-653393/63.
 XX
 PT Modulating expression of a target gene in a cell, for treating cancer, an
 PT immune disease, or a nerve disorder, comprises introducing into the cell
 PT a polynucleotide that forms a duplex region with an mRNA transcribed from
 PT the target gene.
 XX
 PS Claim 2; SEQ ID NO 162; 865pp; English.
 XX
 CC This invention relates to a novel method for modulating the expression of
 CC a target gene in a cell. Specifically, it refers to the introduction into
 CC a cell of a polynucleotide that forms a duplex region with an mRNA
 CC transcribed from the target gene, where the duplex region comprises a
 CC mammalian miRNA target region i.e. a non-coding microRNA (miRNA) that
 CC regulates mRNA at a post-transcriptional level. The present invention of a
 CC describes a method for controlling ontogenesis of a mammal, function of a
 CC mammalian cell, differentiation of a mammalian cell or viability of a
 CC mammalian cell in the post-transcriptional phase, which comprises
 CC introducing a plasmid vector comprising a promoter and nucleic acid
 CC molecule expressing an miRNA or siRNA silencing precursor to the miRNA.
 CC Accordingly, it provides a cell therapy method for treating cancer,
 CC immune disease, nerve disorder (e.g. amyotrophic lateral sclerosis,
 CC Parkinson's disease, or Alzheimer's disease) or an inflammatory disease
 CC by introducing into the cell the miRNA, siRNA silencing precursor to the

CC miRNA or the plasmid vector. As such, they can be developed into
 CC pharmaceutical compositions that exhibit cytostatic, immunosuppressive,
 CC neurotropic, neuroprotective and antiinflammatory activities and hence can
 CC be used for immunotherapy. This oligonucleotide sequence is a human miRNA
 CC target region derived from a target gene of the invention.

XX Sequence 24 BP; 6 A; 7 C; 3 G; 0 T; 8 U; 0 Other;
 SQ Query Match 0.6%; Score 24; DB 1; Length 24;
 Best Local Similarity 66.7%; Pred. No. 37;
 Matches 16; Conservative 8; Mismatches 0; Indels 0; Gaps 0;

OY 2278 TCTGCTTCACTACAGAGACTTTA 2301
 Db 1 UCUGCCUACACAGAGACUUUA 24

RESULT 15
 AAC84796
 ID AAC84796 standard; DNA; 23 BP.
 XX AC AAC84796;
 XX DT 20-APR-2001 (first entry)
 XX DE Human TLR4 gene exon 4 amplifying forward primer.
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

XX OS Homo sapiens.
 XX PN WO200077204-A1.
 XX PD 21-DEC-2000.
 XX PF 08-JUN-2000; 2000WO-US015723.
 XX PR 10-JUN-1999; 99US-00329515.
 XX PA (IOWA) UNIV IOWA RES FOUND.
 XX PA (LORENZ/) LORENZ E.
 XX PI Lorenz E, Schwartz DA, Schutte BC;
 XX WPI; 2001-061872/07.

XX Identifying humans at risk of, or having indication associated with
 XX altered innate immunity involves detecting or determining whether DNA
 XX amplified from a biological sample encodes a portion of variant toll
 XX receptor 4.

XX Example 1; Page 31; 97pp; English.
 XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 XX methods to identify polymorphisms at the human TLR4 locus and to identify
 XX individuals at risk of, or having, an indication associated with altered
 XX innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 XX reagent for detecting a polymorphism in human TLR4 gene. Since the
 XX presence of TLR4 mutation is associated with gram-negative sepsis,
 XX severity of sepsis, pre-term delivery and respiratory distress syndrome
 XX in pre-term infants, agents which alter TLR4 activity are useful for
 XX preventing or ameliorating infection by gram-negative bacteria, sepsis
 XX induced by gram-negative bacteria LPS (lipopolysaccharide) induced
 XX chronic airway disease, asthma, arthritis, local and systemic
 XX inflammatory disease conditions such as systematic inflammatory response
 XX syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 XX pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 XX obstructive pulmonary disease, local gram-negative bacterial infection

CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene

XX Sequence 23 BP; 5 A; 6 C; 3 G; 9 T; 0 U; 0 Other;
 SQ Query Match 0.6%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 44;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2459 TATCATCTTCATTGCTCTGCAGA 2481
 Db 1 TATCATCTTCATTGCTCTGCAGA 23

RESULT 16
 AAC84783
 ID AAC84783 standard; DNA; 23 BP.

XX AC AAC84783;
 XX DT 20-APR-2001 (first entry)
 XX DE Human TLR4 gene exon 4 amplifying forward primer.

XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

XX OS Homo sapiens.
 XX PN WO200077204-A1.
 XX PD 21-DEC-2000.

XX PF 08-JUN-2000; 2000WO-US015723.
 XX PR 10-JUN-1999; 99US-00329515.
 XX PA (IOWA) UNIV IOWA RES FOUND.
 XX PA (LORENZ/) LORENZ E.

XX PI Lorenz E, Schwartz DA, Schutte BC;
 XX WPI; 2001-061872/07.

XX Identifying humans at risk of, or having indication associated with
 XX altered innate immunity involves detecting or determining whether DNA
 XX amplified from a biological sample encodes a portion of variant toll
 XX receptor 4.

XX Example 1; Page 31; 97pp; English.

XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 XX methods to identify polymorphisms at the human TLR4 locus and to identify
 XX individuals at risk of, or having, an indication associated with altered
 XX innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 XX reagent for detecting a polymorphism in human TLR4 gene. Since the
 XX presence of TLR4 mutation is associated with gram-negative sepsis,
 XX severity of sepsis, pre-term delivery and respiratory distress syndrome
 XX in pre-term infants, agents which alter TLR4 activity are useful for
 XX preventing or ameliorating infection by gram-negative bacteria, sepsis
 XX induced by gram-negative bacteria LPS (lipopolysaccharide) induced
 XX chronic airway disease, asthma, arthritis, local and systemic
 XX inflammatory disease conditions such as systematic inflammatory response
 XX syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 XX pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 XX obstructive pulmonary disease, local gram-negative bacterial infection
 XX and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 XX amplifying the exons of human TLR4 gene

SQ Sequence 23 BP; 10 A; 0 C; 8 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 44;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 TGGGAGAAATTTAGAAATGAAGGA 965
 |||||
 DB 1 TGGGAGAAATTTAGAAATGAAGGA 23

RESULT 17
 AAC84787
 ID AAC84787 standard; DNA; 23 BP.
 XX
 AC AAC84787;
 XX
 DT 20-APR-2001 (first entry)
 XX
 DE Human TLR4 gene exon 4 amplifying forward primer.
 XX
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; 5S.
 XX
 OS Homo sapiens.
 XX
 PN WO200077204-A1.
 XX
 PD 21-DEC-2000.
 XX
 PF 08-JUN-2000; 2000WO-US015723.
 XX
 PR 10-JUN-1999; 99US-00329515.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 PA (LORENZ/) LORENZ E.
 XX
 PI Lorenz E, Schwartz DA, Schutte BC;
 XX
 DR WPI; 2001-061872/07.
 XX
 PT Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX
 PS Example 1; Page 31; 97pp; English.
 XX
 CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene
 XX
 SQ Sequence 23 BP; 7 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
 Query Match 0.6%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 44;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

SQ Sequence 23 BP; 10 A; 0 C; 8 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 44;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1410 TCACAACTCTTTGGGCTTAGAAC 1432
 |||||
 DB 1 TCACAACTCTTTGGGCTTAGAAC 23

RESULT 18
 AAC84808/c
 ID AAC84808 standard; DNA; 23 BP.
 XX
 AC AAC84808;
 XX
 DT 20-APR-2001 (first entry)
 XX
 DE Human TLR4 gene exon 4 amplifying reverse primer.
 XX
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; 5S.
 XX
 OS Homo sapiens.
 XX
 PN WO200077204-A1.
 XX
 PD 21-DEC-2000.
 XX
 PF 08-JUN-2000; 2000WO-US015723.
 XX
 PR 10-JUN-1999; 99US-00329515.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 PA (LORENZ/) LORENZ E.
 XX
 PI Lorenz E, Schwartz DA, Schutte BC;
 XX
 DR WPI; 2001-061872/07.
 XX
 PT Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX
 PS Example 1; Page 31; 97pp; English.
 XX
 CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene
 XX
 SQ Sequence 23 BP; 6 A; 1 C; 8 G; 8 T; 0 U; 0 Other;
 Query Match 0.6%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 44;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1200 CCACATTGAAGTCAATCTCT 1222
 DE |||||
 DB 23 CCACATTGAAGTCAATCTCT 1

RESULT 19
 ACC43826/c
 ID ACC43826 standard; DNA; 24 BP.
 AC
 AC AC43826;
 XX
 DT 11-AUG-2003 (first entry)
 XX
 DE Antisense PCR primer for human toll-like receptor 4 (TLR4) cDNA.
 KW
 KW Toll-like receptor; TLR; central nervous system; CNS;
 KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
 KW Pick's disease; multiple sclerosis; stroke; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1288226-A1.
 XX
 XX 05-MAR-2003.
 PD
 XX 03-SEP-2001; 2001EP-00203325.
 PF
 XX 03-SEP-2001; 2001EP-00203325.
 PR
 XX (NEDE) NEDERLANDSE ORG TOEGEPAST.
 PA
 XX Van Noort JM;
 PI
 XX WPI; 2003-344752/33.
 DR
 XX
 XX Modifying the expression of Toll-like receptors (TLR), useful for
 PT influencing neurodegeneration or neuroprotection in the human CNS,
 PT comprises contacting CNS cells with a TLR-expression modifying agent,
 PT e.g. alpha B-crystallin.
 PT
 XX Disclosure; Page 7; 20pp; English.
 PS
 XX The specification describes a method of modifying the expression of at a
 CC toll-like receptor (TLR) in cells of the human central nervous system
 CC (CNS). The method comprises contacting the cells with a TLR-expression
 CC modifying agent, selected from substances that are endogenous to the
 CC human CNS and its parts or variants, that is capable of altering the
 CC expression of a TLR in the cells. The TLR-expression modifying agent is
 CC useful for preparing a pharmaceutical composition for retarding or
 CC inhibiting a neurodegenerative process and/or stimulating a
 CC neuroprotective process in a human being afflicted by a neurodegenerative
 CC disorder such as Alzheimer's disease, Parkinson's disease, Pick's
 CC disease, multiple sclerosis or stroke. The present PCR primer was used to
 CC amplify cDNA encoding human TLR1. The primer was used to determine the
 CC amount of TLR present in human glia cells in a semi-quantitative RT-PCR
 XX
 SQ Sequence 24 BP; 3 A; 8 C; 5 G; 8 T; 0 U; 0 Other;
 Query Match 0.6%; Score 22.4; DB 1; Length 24;
 Best Local Similarity 95.8%; Pred. No. 55;
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2627 GAATCCAGAGGACACTGGGTAC 2650
 DE |||||
 DB 24 GAATCCAGAGGACACTGGGTAC 1

RESULT 20
 AAC84786
 ID AAC84786 standard; DNA; 22 BP.
 XX
 AC AAC84786;
 XX
 DT 20-APR-2001 (first entry)
 XX
 DE Human TLR4 gene exon 4 amplifying reverse primer.

DT 20-APR-2001 (first entry)
 XX
 DE Human TLR4 gene exon 4 amplifying forward primer.
 XX
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200077204-A1.
 XX
 PD 21-DEC-2000.
 XX
 PF 08-JUN-2000; 2000WO-US015723.
 XX
 PR 10-JUN-1999; 99US-00329515.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 PA (LORENZ) LORENZ E.
 XX
 PI Lorenz E, Schwartz DA, Schutte BC;
 XX
 DR WPI; 2001-061872/07.
 XX
 XX Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX
 PS Example 1; Page 31; 97pp; English.
 XX
 CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene
 XX
 SQ Sequence 22 BP; 6 A; 4 C; 4 G; 8 T; 0 U; 0 Other;
 Query Match 0.6%; Score 22; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 52;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1323 TTCAAAGTTGCTGTTCTCAA 1344
 DE |||||
 DB 1 TTCAAAGTTGCTGTTCTCAA 22

RESULT 21
 AAC84806/c
 ID AAC84806 standard; DNA; 22 BP.
 XX
 AC AAC84806;
 XX
 DT 20-APR-2001 (first entry)
 XX
 DE Human TLR4 gene exon 4 amplifying reverse primer.

PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX Example 1; Page 31; 97pp; English.
XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX Sequence 21 BP; 7 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 524 AGCCTTTTCTGGACTATCAAG 544
DB 21 AGCCTTTTCTGGACTATCAAG 1
RESULT 26
AAC84823/c
ID AAC84823 standard; DNA; 21 BP.
XX AAC84823;
AC AAC84823;
DT 20-APR-2001 (first entry)
XX Human TLR4 gene exon 4 amplifying reverse primer.
DE TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX Homo sapiens.
OS WO200077204-A1.
XX WO200077204-A1.
XX 21-DEC-2000.
XX 08-JUN-2000; 2000WO-US015723.
XX 10-JUN-1999; 99US-00329515.
XX (IOWA) UNIV IOWA RES FOUND.
PA (LORENZ) LORENZ E.
PI Lorenz E, Schwartz DA, Schutte BC;
XX WPI; 2001-061872/07.
XX Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.

XX Example 1; Page 31; 97pp; English.
XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX Sequence 21 BP; 5 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2813 AGATATGCGGGCTGCTTAATC 2833
DB 21 AGATATGCGGGCTGCTTAATC 1
RESULT 27
ACC70796/c
ID ACC70796 standard; DNA; 21 BP.
XX ACC70796;
AC ACC70796;
DT 20-NOV-2003 (first entry)
XX Human Toll-like receptor 4, Tlr-4, PCR primer #2.
DE Human; PCR; primer; vulnery; anti-tumour; antirheumatic; antiarthritic;
KW antiarteriosclerotic; cytostatic; neointima; scar; plaque; blood vessel;
KW Toll-like receptor 4; adventitial cell; Tlr-4; ss.
XX Homo sapiens.
OS EPI302206-A1.
XX EPI302206-A1.
PD 16-APR-2003.
XX 11-OCT-2001; 2001EP-00203846.
XX 11-OCT-2001; 2001EP-00203846.
XX (UYUT-) UNIV UTRECHT MEDISCH CENT.
PA (UYUT-) RIJKSUNIV UTRECHT.
XX De Kleijn DPV, Pasterkamp G;
XX WPI; 2003-484923/46.
XX Interfering with the formation of a neointima/scar and/or a plaque in a
PT blood vessel, useful for modulating tumor growth, comprises providing a
PT ligand capable of modulating Toll-like receptor activity of adventitial
PT cells.
XX Disclosure; Page 7; 23pp; English.
XX The present invention relates to a method for interfering with the
CC formation of a neointima/scar and/or a plaque in a blood vessel by
CC providing a ligand capable of modulating Toll-like receptor activity of

CC adventitial cells. The method is useful for reducing the formation of a
CC neointima/scar and/or a plaque in a blood vessel after stenting.
CC angioplasty, heart transplantation, by pass surgery, arteriovenous
CC shunting and infection, especially bacterial infection. The method is
CC also useful for modulating tumour growth, and for modulating the effects
CC of rheumatoid arthritis. The present sequence is a PCR primer for human
CC Toll-like receptor 4 (TLR-4)
XX
SQ Sequence 21 BP; 8 A; 9 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2356 GAAAGGTGATTGTTGTTGGTGT 2376
DB 21 GAAAGGTGATTGTTGTTGGTGT 1
RESULT 28
ADF17209/c
ID ADF17209 standard; DNA; 25 BP.
XX
AC ADF17209;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human toll-like receptor 4 (TLR4) gene PCR primer #3.
XX
KW therapeutic agent; endothelial disorder; 3-amino-1;
KW 2-benzisothiazole compound; endothelial disorders; toxemia;
KW severe toxemia; toxic shock; haemorrhagic shock;
KW alcohol induced cirrhosis; adult respiratory distress syndrome;
KW chronic rheumatoid arthritis; ulcerative gastritis; Crohn's disease;
KW glomerulonephritis; infectious carditis; systemic lupus erythematosus;
KW scleroderma; Sjogren's syndrome; multiple organ failure;
KW autoimmune disease; multiple sclerosis; PCR; primer; ss; human;
KW toll-like receptor 4; TLR4.
XX
OS Homo sapiens.
XX
PN WO2003087072-A1.
XX
PD 23-OCT-2003.
XX
PF 31-MAR-2003; 2003WO-JP004108.
XX
PR 29-MAR-2002; 2002JP-00132121.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
XX
PI Furusako S, Satoh T, Nakamura M, Mizuno M, Mori S;
XX
XX WPI; 2003-903121/82.
XX
XX Agents for treating diseases associated with endothelial disorders,
PT toxemia or toll like receptor signaling comprise new or known 3-amino-1,2
PT -benzisothiazole compounds.
XX
PS Example 4; SEQ ID NO 6; 180pp; Japanese.
XX
CC The invention comprises therapeutic agents for preventing or treating
CC diseases associated with endothelial disorders, the agents contain a 3-
CC amino-1,2-benzisothiazole compound. The therapeutic agents of the
CC invention are useful for preventing/treating: diseases associated with
CC endothelial disorders, toxemia, severe toxemia, toxic shock,
CC haemorrhagic shock, alcohol induced cirrhosis, adult respiratory distress
CC syndrome, chronic rheumatoid arthritis, ulcerative gastritis, Crohn's
CC disease, glomerulonephritis, infectious carditis, systemic lupus
CC erythematosus, scleroderma, Sjogren's syndrome, multiple organ failure
CC or autoimmune diseases (e.g. multiple sclerosis). The present DNA
CC sequence represents a PCR primer that was used in the exemplification of
CC the invention.

XX
SQ Sequence 25 BP; 12 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.6%; Score 21; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 84;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1140 TTTTCTTATATAATTTCCGGATGG 1160
DB 21 TTTTCTTATATAATTTCCGGATGG 1
RESULT 29
ACC74143/c
ID ACC74143 standard; DNA; 25 BP.
XX
AC ACC74143;
XX
DT 11-JUL-2003 (first entry)
XX
DE Probe for detecting murine TLR4 expression.
XX
KW Mouse; immunomodulator; antibacterial; immunosuppressive; CSF-1;
KW colony stimulating factor-1; septic shock; TLR; toll-like receptor;
KW interleukin-12; IL-12; HPRT; hypoxanthine phosphoribosyl transferase;
KW probe; ss.
XX
OS Mus sp.
XX
PN WO2003028752-A1.
XX
PD 10-APR-2003.
XX
PF 03-OCT-2002; 2002WO-AU001348.
XX
PR 03-OCT-2001; 2001AU-00008071.
XX
PA (UYQU) UNIV QUEENSLAND.
XX
PI Hume DA, Sweet MJ, Stacey KJ, Sester DP;
XX
DR WPI; 2003-381587/36.
XX
PT Modulating an immune response in an animal, useful for the prophylactic
PT or therapeutic treatment of bacterially-induced septic shock, by
PT modulating colony stimulating factor-1 (CSF-1) activity in an animal.
XX
PS Example; Page 19; 58pp; English.
XX
CC The invention relates to modulating an immune response in an animal. The
CC method of the invention comprises modulating colony stimulating factor-1
CC (CSF-1) activity in order to modulate the immune response of the animal.
CC Also disclosed is a pharmaceutical composition comprising a modulator of
CC CSF-1 activity and a pharmaceutical carrier. The method of the
CC pharmaceutical composition is useful for the prophylactic or therapeutic
CC treatment of bacterially-induced septic shock. The sequences given in
CC records ACC74129-ACC74161 represent primers and probes used in an example
CC from the invention to detect murine genes
XX
SQ Sequence 25 BP; 6 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.5%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 1e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 556 TGGTGGCTGTGGAGACAAATCTAGC 580
DB 25 TGGTGGCTGTGGAGACAAATTTGCC 1
RESULT 30
AAI71235
ID AAI71235 standard; DNA; 20 BP.

XX AC AAI71235;
 XX DT 23-JAN-2002 (first entry)
 XX DE Human Toll like receptor 4 PCR sense primer 2 SEQ ID NO:8.
 XX KW Human; Toll like receptor; TLR; CD14; antibody; anti-CD14 antibody;
 XX KW TLR/CD14 binding inhibitor; antibacterial; immunosuppressive;
 XX KW antipyretic; hypertensive; immunostimulant; haemostatic; vasotropic;
 XX KW bacterial infection; sepsis; fever; hypotension; leukopaenia;
 XX KW thrombopaenia; shock; multi-organ failure; ss.
 XX OS Homo sapiens.
 XX PN WO200172993-A1.
 XX PD 04-OCT-2001.
 XX PF 02-APR-2001; 2001WO-JP002869.
 XX PR 31-MAR-2000; 2000JP-00099617.
 XX PR 22-NOV-2000; 2000JP-00356719.
 XX PR 28-MAR-2001; 2001US-00806158.
 XX PA (MOCH) MOCHIDA PHARM CO LTD.
 XX PI Furusako S, Mori S, Shirakawa K, Takahashi T;
 XX DR WPI; 2001-616487/71.
 XX PT Anti-CD14 antibody or its fragment inhibiting the binding of CD14 to Toll
 PT -like receptor, applicable in drugs for treating bacterial infection as
 PT well as sepsis, fever, hypotension, leukopenia, thrombopenia and shock.
 XX Example 2; Page 169; 202pp; Japanese.
 XX The present invention describes an anti-CD14 antibody, which has a
 CC function of inhibiting the binding of CD14 to the Toll-like receptor
 CC (TLR). The anti-CD14 antibody can specifically recognise the epitope
 CC containing the domain from numbers 289-315 in human CD14 of the sequence
 CC in AAG68127 or a part of it. Anti-CD14 antibody has antibacterial,
 CC haemostatic and vasotropic activities. The antibody together with other
 CC polypeptides are applicable in drugs for treating bacterial infection as
 CC well as sepsis, fever, hypotension, leukopaenia, thrombopaenia, shock and
 CC multi-organ failure. AAG68127 and AAI71230 to AAI71295
 CC represent sequences used in the exemplification of the present invention
 XX SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 501 CCCATCCAGAGTTAGCCCT 520
 DB 1 CCCATCCAGAGTTAGCCCT 20
 RESULT 31
 AAC84818/c
 ID AAC84818 standard; DNA; 20 BP.
 XX AC AAC84818;
 XX DT 20-APR-2001 (first entry)
 XX DE Human TLR4 gene exon 4 amplifying reverse primer.
 XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW acute respiratory distress syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
 XX OS Homo sapiens.
 XX PN WO200077204-A1.
 XX PD 21-DEC-2000.
 XX PF 08-JUN-2000; 2000WO-US015723.
 XX PR 10-JUN-1999; 99US-00329515.
 XX PA (IOWA) UNIV IOWA RES FOUND.
 XX PA (LORENZ) LORENZ E.
 XX PI Lorenz E, Schwartz DA, Schutte BC;
 XX DR WPI; 2001-061872/07.
 XX PT Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX Example 1; Page 31; 97pp; English.
 XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene
 XX SQ Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
 Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2380 AGCACTTCATCCAGAGCCGC 2399
 DB 20 AGCACTTCATCCAGAGCCGC 1
 RESULT 32
 AAC84789
 ID AAC84789 standard; DNA; 20 BP.
 XX AC AAC84789;
 XX DT 20-APR-2001 (first entry)
 XX DE Human TLR4 gene exon 4 amplifying forward primer.
 XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

XX OS Homo sapiens.
XX PN WO200077204-A1.
XX PD 21-DEC-2000.
XX PF 08-JUN-2000; 2000WO-US015723.
XX PR 10-JUN-1999; 99US-00329515.
XX PA (IOWA) UNIV IOWA RES FOUND.
XX PA (LORENZ/) LORENZ E.
XX PI Lorenz E, Schwartz DA, Schutte BC;
XX DR WPI; 2001-061872/07.
XX PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX PS Example 1; Page 31; 97pp; English.
XX CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systemic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1612 TCCAGGAAACTTCCTTCCA 1631
Db 1 TCCAGGAAACTTCCTTCCA 20
RESULT 33
AAC84791
ID AAC84791 standard; DNA; 20 BP.
XX AC AAC84791;
XX DT 20-APR-2001 (first entry)
XX DE Human TLR4 gene exon 4 amplifying forward primer.
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
XX chronic airway disease; arthritis; inflammatory disease; SIRS; human;
XX systematic inflammatory response syndrome; pyelonephritis; bronchitis;
XX acute respiratory distress syndrome; gall bladder disease; pneumonia;
XX cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
OS Homo sapiens.
XX PN WO200077204-A1.
XX PD 21-DEC-2000.

PN WO200077204-A1.
XX PD 21-DEC-2000.
XX PF 08-JUN-2000; 2000WO-US015723.
XX PR 10-JUN-1999; 99US-00329515.
XX PA (IOWA) UNIV IOWA RES FOUND.
XX PA (LORENZ/) LORENZ E.
XX PI Lorenz E, Schwartz DA, Schutte BC;
XX DR WPI; 2001-061872/07.
XX PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX PS Example 1; Page 31; 97pp; English.
XX CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systemic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1924 ACCAGAGTTTCTGCAATGG 1943
Db 1 ACCAGAGTTTCTGCAATGG 20
RESULT 34
AAC84798
ID AAC84798 standard; DNA; 20 BP.
XX AC AAC84798;
XX DT 20-APR-2001 (first entry)
XX DE Human TLR4 gene exon 4 amplifying forward primer.
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
XX chronic airway disease; arthritis; inflammatory disease; SIRS; human;
XX systematic inflammatory response syndrome; pyelonephritis; bronchitis;
XX acute respiratory distress syndrome; gall bladder disease; pneumonia;
XX cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
OS Homo sapiens.
XX PN WO200077204-A1.
XX PD 21-DEC-2000.

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XX PF 08-JUN-2000; 2000WO-US015723.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PR 10-JUN-1999; 99US-00329515.
XX PA (LORENZ ) LORENZ E.
XX PI Lorenz E, Schwartz DA, Schutte BC;
XX XX WPI; 2001-061872/07.
XX DR Identifying humans at risk of, or having indication associated with
XX PT altered innate immunity involves detecting or determining whether DNA
XX PT amplified from a biological sample encodes a portion of variant toll
XX PT receptor 4.
XX PS Example 1; Page 31; 97pp; English.
XX CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
XX CC methods to identify polymorphisms at the human TLR4 locus and to identify
XX CC individuals at risk of, or having, an indication associated with altered
XX CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
XX CC reagent for detecting a polymorphism in human TLR4 gene. Since the
XX CC presence of TLR4 mutation is associated with gram-negative sepsis,
XX CC severity of sepsis, pre-term delivery and respiratory distress syndrome
XX CC in pre-term infants, agents which alter TLR4 activity are useful for
XX CC preventing or ameliorating infection by gram-negative bacteria, sepsis
XX CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
XX CC chronic airway disease, asthma, arthritis, local and systemic
XX CC inflammatory disease conditions such as systematic inflammatory response
XX CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
XX CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
XX CC obstructive pulmonary disease, local gram-negative bacterial infection
XX CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
XX CC amplifying the exons of human TLR4 gene
XX SQ Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2590 GACGACTCAGAAAGCCCTG 2609
Db 1 GACGACTCAGAAAGCCCTG 20

RESULT 35
AAC84821/c
ID AAC84821 standard; DNA; 20 BP.
XX AC AAC84821;
XX DT 20-APR-2001 (first entry)
XX DE Human TLR4 gene exon 4 amplifying reverse primer.
XX KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
XX KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
XX KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
XX KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
XX KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX OS Homo sapiens.
XX FN WO200077204-A1.
XX PD 21-DEC-2000.
XX PF 08-JUN-2000; 2000WO-US015723.
XX PR 10-JUN-1999; 99US-00329515.
XX PA (IOWA ) UNIV IOWA RES FOUND.

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PR 10-JUN-1999; 99US-00329515.
XX (IOWA ) UNIV IOWA RES FOUND.
XX PA (LORENZ ) LORENZ E.
XX PI Lorenz E, Schwartz DA, Schutte BC;
XX XX WPI; 2001-061872/07.
XX DR Identifying humans at risk of, or having indication associated with
XX PT altered innate immunity involves detecting or determining whether DNA
XX PT amplified from a biological sample encodes a portion of variant toll
XX PT receptor 4.
XX PS Example 1; Page 31; 97pp; English.
XX CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
XX CC methods to identify polymorphisms at the human TLR4 locus and to identify
XX CC individuals at risk of, or having, an indication associated with altered
XX CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
XX CC reagent for detecting a polymorphism in human TLR4 gene. Since the
XX CC presence of TLR4 mutation is associated with gram-negative sepsis,
XX CC severity of sepsis, pre-term delivery and respiratory distress syndrome
XX CC in pre-term infants, agents which alter TLR4 activity are useful for
XX CC preventing or ameliorating infection by gram-negative bacteria, sepsis
XX CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
XX CC chronic airway disease, asthma, arthritis, local and systemic
XX CC inflammatory disease conditions such as systematic inflammatory response
XX CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
XX CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
XX CC obstructive pulmonary disease, local gram-negative bacterial infection
XX CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
XX CC amplifying the exons of human TLR4 gene
XX SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2590 GACGACTCAGAAAGCCCTG 2609
Db 20 GACGACTCAGAAAGCCCTG 1

RESULT 36
AAC84775/c
ID AAC84775 standard; DNA; 20 BP.
XX AC AAC84775;
XX DT 20-APR-2001 (first entry)
XX DE Human TLR4 gene amplifying primer 2R.
XX KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
XX KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
XX KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
XX KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
XX KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX OS Homo sapiens.
XX FN WO200077204-A1.
XX PD 21-DEC-2000.
XX PF 08-JUN-2000; 2000WO-US015723.
XX PR 10-JUN-1999; 99US-00329515.
XX PA (IOWA ) UNIV IOWA RES FOUND.

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PA (LORENZ/) LORENZ E.
 XX Lorenz E, Schwartz DA, Schutte BC;
 XX WPI; 2001-061872/07.
 DR Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX Example 1; Page 29; 97pp; English.
 PS The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 XX methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84772-775 represent PCR primers for
 CC amplifying the human TLR4 gene
 XX Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2590 GACGACTCAGAAAGCCCTG 2609
 DB 20 GACGACTCAGAAAGCCCTG 1
 RESULT 37
 AAC84785
 ID AAC84785 standard; DNA; 20 BP.
 XX AAC84785;
 AC
 XX 20-APR-2001 (first entry)
 DT Human TLR4 gene exon 4 amplifying forward primer.
 DE TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 XX respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
 XX Homo sapiens.
 OS WO200077204-A1.
 XX 21-DEC-2000.
 PN 08-JUN-2000; 2000WO-US015723.
 XX 21-DEC-2000.
 PD 10-JUN-1999; 99US-00329515.
 XX 08-JUN-2000; 2000WO-US015723.
 XX 10-JUN-1999; 99US-00329515.
 XX (IOWA) UNIV IOWA RES FOUND.
 XX (LORENZ/) LORENZ E.
 PA Lorenz E, Schwartz DA, Schutte BC;
 XX WPI; 2001-061872/07.

XX WPI; 2001-061872/07.
 DR Identifying humans at risk of, or having indication associated with
 XX altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 XX Example 1; Page 31; 97pp; English.
 PS The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 XX methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene
 XX Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
 SQ Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1190 TGGACAGTTTCCCATTTGA 1209
 DB 1 TGGACAGTTTCCCATTTGA 20
 RESULT 38
 AAC84792
 ID AAC84792 standard; DNA; 20 BP.
 XX AAC84792;
 AC
 XX 20-APR-2001 (first entry)
 DT Human TLR4 gene exon 4 amplifying forward primer.
 DE TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
 XX Homo sapiens.
 OS WO200077204-A1.
 XX 21-DEC-2000.
 PN 08-JUN-2000; 2000WO-US015723.
 XX 21-DEC-2000.
 PD 10-JUN-1999; 99US-00329515.
 XX 08-JUN-2000; 2000WO-US015723.
 XX 10-JUN-1999; 99US-00329515.
 XX (IOWA) UNIV IOWA RES FOUND.
 XX (LORENZ/) LORENZ E.
 PA Lorenz E, Schwartz DA, Schutte BC;
 XX WPI; 2001-061872/07.

PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2017 TGCCGTGCTGAGTTTGAAT 2036
|||||
DB 1 TGCCGTGCTGAGTTTGAAT 20
RESULT 39
AAC84799
ID AAC84799 standard; DNA; 20 BP.
XX
AC AAC84799;
XX
DT 20-APR-2001 (first entry)
DE
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
FN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
XX
PA (LORENZ) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.

PT receptor 4.
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2658 AATTGGCAGGAAGCAACATC 2677
|||||
DB 1 AATTGGCAGGAAGCAACATC 20
RESULT 40
AAC84825/c
ID AAC84825 standard; DNA; 20 BP.
XX
AC AAC84825;
XX
DT 20-APR-2001 (first entry)
DE
XX
DE Reverse primer derived from human TLR4 gene exon 4.
XX
TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
FN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
XX
PA (LORENZ) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 33; 97pp; English.

XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. The present sequence represents a reverse primer
 CC derived from exon 4 of the human TLR4 gene, used in multi-tissue cDNA
 CC expression screen

XX Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
 SQ Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 448 ATGGGGCATATCAGAGCCTA 467
 DB |||||||||||||||||||
 20 ATGGGGCATATCAGAGCCTA 1

RESULT 41
 AAC84812/c
 ID AAC84812 standard; DNA; 20 BP.
 AC AAC84812;
 XX
 XX 20-APR-2001 (first entry)
 DE Human TLR4 gene exon 4 amplifying reverse primer.
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
 OS Homo sapiens.
 XX WO200077204-A1.
 PN 21-DEC-2000.
 XX 08-JUN-2000; 2000WO-US015723.
 PF 10-JUN-1999; 99US-00329515.
 PR (IOWA) UNIV IOWA RES FOUND.
 XX (LORE/) LORENZ E.
 PA Lorenz E, Schwartz DA, Schutte BC;
 XX WPI; 2001-061872/07.
 DR Identifying humans at risk of, or having indication associated with
 XX altered innate immunity involves detecting or determining whether DNA
 XX amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 PS Example 1; Page 31; 97pp; English.
 CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and

CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene

XX Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
 SQ Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1656 TTGACCTTCCTGGACCTCTC 1675
 DB |||||||||||||||||||
 20 TTGACCTTCCTGGACCTCTC 1

RESULT 42
 AAC84774
 ID AAC84774 standard; DNA; 20 BP.
 AC AAC84774;
 XX
 XX 20-APR-2001 (first entry)
 DE Human TLR4 gene amplifying primer 2F.
 KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
 OS Homo sapiens.
 XX WO200077204-A1.
 PN 21-DEC-2000.
 XX 08-JUN-2000; 2000WO-US015723.
 PF 10-JUN-1999; 99US-00329515.
 PR (IOWA) UNIV IOWA RES FOUND.
 XX (LORE/) LORENZ E.
 PA Lorenz E, Schwartz DA, Schutte BC;
 XX WPI; 2001-061872/07.
 DR Identifying humans at risk of, or having indication associated with
 XX altered innate immunity involves detecting or determining whether DNA
 XX amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 PS Example 1; Page 29; 97pp; English.
 CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic

CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84772-775 represent PCR primers for
 CC amplifying the human TLR4 gene

XX Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2467 TCATTGCTCTGCAGAGGTG 2486

Db 1 TCATTGCTCTGCAGAGGTG 20

RESULT 43

AAC84804/c
 ID AAC84804 standard; DNA; 20 BP.

XX AC AAC84804;

XX 20-APR-2001 (first entry)

XX Human TLR4 gene exon 4 amplifying reverse primer.

XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

XX OS Homo sapiens.

XX PN WO200077204-A1.

XX PD 21-DEC-2000.

XX PF 08-JUN-2000; 2000WO-US015723.

XX PR 10-JUN-1999; 99US-00329515.

XX PA (IOWA) UNIV IOWA RES FOUND.

XX PA (LORENZ) LORENZ E.

XX PI Lorenz E, Schwartz DA, Schutte BC;

XX DR WPI; 2001-061872/07.

XX Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.

XX Example 1; Page 31; 97pp; English.

XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome

CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene

XX Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 73;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 733 TTTATTGCACAGACTTGGG 752

Db 20 TTTATTGCACAGACTTGGG 1

RESULT 44

AAC84813/c

ID AAC84813 standard; DNA; 20 BP.

XX AC AAC84813;

XX 20-APR-2001 (first entry)

XX Human TLR4 gene exon 4 amplifying reverse primer.

XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

XX OS Homo sapiens.

XX PN WO200077204-A1.

XX PD 21-DEC-2000.

XX PF 08-JUN-2000; 2000WO-US015723.

XX PR 10-JUN-1999; 99US-00329515.

XX PA (IOWA) UNIV IOWA RES FOUND.

XX PA (LORENZ) LORENZ E.

XX PI Lorenz E, Schwartz DA, Schutte BC;

XX DR WPI; 2001-061872/07.

XX Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.

XX Example 1; Page 31; 97pp; English.

XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
 CC methods to identify polymorphisms at the human TLR4 locus and to identify
 CC individuals at risk of, or having, an indication associated with altered
 CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
 CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced

chronic airway disease, asthma, arthritis, local and systemic inflammatory disease conditions such as systemic inflammatory response syndrome (SIRS) or acute respiratory distress syndrome (ARDS), pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic obstructive pulmonary disease, local gram-negative bacterial infection and cystic fibrosis. Sequences AAC94776-823 represent PCR primers for amplifying the exons of human TIR4 gene

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20: Conservative 0; Mismatches 0; Indels

Qy 1788 TGCTGAACTCCCTCCAGG 1807
 |||||
 Db 20 TGCTGAACTCCCTCCAGG 1

RESULT 45
AAC84820/C
ID AAC84820 standard: DNA: 20 BP.

AAC84820;

DT 20-APR-2001 (first entry)

Human TLR4 gene exon 4 amplifying reverse primer.

TUR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW
respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW
chronic airway disease; arthritis; inflammatory disease; SIRs; human;
KW
systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW
acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW
cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
KW

Homo sapiens.

PN WO200077204-A1.

PD 21-DEC-2000.

08-JUN-2000; 2000WO-US015723.

PR 10-JUN-1999: 99US-00329515.

PA (IOWA) UNIV IOWA RES FOUND.

PA (LORE/) LORENZ E.

PI Lorenz E, Schwartz DA, Schutte BC;

DR WPI; 2001-061872/07.

Identifying humans at risk of, or having indication associated with altered innate immunity involves detecting or determining whether DNA amplified from a biological sample encodes a portion of variant toll receptor 4.

PS Example 1: Page 31: 97pp: English.

The invention relates to human toll receptor 4 (TLR4) nucleic acid and methods to identify polymorphisms at the human TLR4 locus and to identify individuals at risk of, or having, an indication associated with altered innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic reagent for detecting a polymorphism in human TLR4 gene. Since the presence of TLR4 mutation is associated with gram-negative sepsis, severity of sepsis, pre-term delivery and respiratory distress syndrome in pre-term infants, agents which alter TLR4 activity are useful for preventing or ameliorating infection by gram-negative bacteria, sepsis induced by gram-negative bacteria, LPS (lipopolysaccharide) induced chronic airway disease, asthma, arthritis, local and systemic inflammatory disease conditions such as systematic inflammatory response syndrome (SIRS) or acute respiratory distress syndrome (ARDS).

CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels

QY 2659 ATGGCAGGAAGCAACATCT 2678
|||
Db 20 ATGGCAGGAAGCAACATCT 1

RESULT 46

AAC84822/c

ID AAC84822 standard; DNA; 20 BP.

AAC84822;

DT 20-APR-2001 (first entry)

Human TLR4 gene exon 4 amplifying reverse primer.

TUR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
 KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
 KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
 KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
 KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
 KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

OS Homo sapiens.

PN WO200077204-A1.

21-DEC-2000.

08-JUN-2000: 2000WO-US015723.

PR 10-JUN-1999: 99US-00329515.

PA (TOWA) INTV TOWA RES FOUND.

PA (LORE/) LORENZ E.

XX Lorenz E. Schwartz DA, Schutte BC; PI

WPT: 2001-061872/07.

AA Identifying humans at risk of, or having indication associated with
 PT altered innate immunity involves detecting or determining whether DNA
 PT amplified from a biological sample encodes a portion of variant toll
 PT receptor 4.
 PT

PS Example 1: Page 31: 97pp: English.

The invention relates to human toll receptor 4 (TLR4) nucleic acid and methods to identify polymorphisms at the human TLR4 locus and to identify individuals at risk of, or having, an indication associated with altered innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic reagent for detecting a polymorphism in human TLR4 gene. Since the presence of TLR4 mutation is associated with gram-negative sepsis, severity of sepsis, pre-term delivery and respiratory distress syndrome in pre-term infants, agents which alter TLR4 activity are useful for preventing or ameliorating infection by gram-negative bacteria, sepsis induced by gram-negative bacteria, LPS (lipopolysaccharide) induced chronic airway disease, asthma, arthritis, local and systemic inflammatory disease conditions such as systematic inflammatory response syndrome (SIRS) or acute respiratory distress syndrome (ARDS), pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic obstructive pulmonary disease, local gram-negative bacterial infection and cystic fibrosis. Sequences AAC841776-823 represent PCR primers for

```

CC amplifying the exons of human TLR4 gene
XX Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
SQ

Query Match      0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2725 CTGGTCCCAACACTTGTTCA 2744
DB 20 CTGGTCCCAACACTTGTTCA 1

RESULT 47
AAC84773/c
ID AAC84773 standard; DNA; 20 BP.
XX
AC AAC84773;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene amplifying primer 1R.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PP 10-JUN-1999; 99US-00329515.
XX
PR (IOWA ) UNIV IOWA RES FOUND.
XX
PA (LORENZ ) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 29; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84772-775 represent PCR primers for
CC amplifying the human TLR4 gene
XX
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match      0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 587 AGAAGACTTCCCATTTGGAC 606
DB 20 AGAAGACTTCCCATTTGGAC 1

RESULT 48
AAC84781
ID AAC84781 standard; DNA; 20 BP.
XX
AC AAC84781;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PP 10-JUN-1999; 99US-00329515.
XX
PR (IOWA ) UNIV IOWA RES FOUND.
XX
PA (LORENZ ) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match      0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;

```

Matches	20;	Conservative	0;	Mismatches	0;	Indels	0;	Gaps	0;																
QY	700	ACTTGGACCTTTCCAGCAAC	719																						
Db	1	ACTTGGACCTTTCCAGCAAC	20																						
RESULT 49																									
ID	AAC84795	AAC84795 standard; DNA; 20 BP.																							
XX	AC	AAC84795;																							
XX	XX	20-APR-2001 (first entry)																							
DE	XX	Human TLR4 gene exon 4 amplifying forward primer.																							
XX	XX	TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;																							
KW	KW	respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;																							
KW	KW	chronic airway disease; arthritis; inflammatory disease; SIRS; human;																							
KW	KW	systemic inflammatory response syndrome; pyelonephritis; bronchitis;																							
KW	KW	acute respiratory distress syndrome; gall bladder disease; pneumonia;																							
KW	KW	cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.																							
OS	XX	Homo sapiens.																							
XX	XX	WO200077204-A1.																							
XX	XX	21-DEC-2000.																							
PF	XX	08-JUN-2000; 2000WO-US015723.																							
XX	XX	10-JUN-1999; 99US-00329515.																							
XX	XX	(IOWA) UNIV IOWA RES FOUND.																							
PA	PA	(LORENZ) LORENZ E.																							
XX	XX	Lorenz E, Schwartz DA, Schutte BC;																							
PI	XX	WPI; 2001-061872/07.																							
XX	XX	Identifying humans at risk of, or having indication associated with																							
PT	PT	altered innate immunity involves detecting or determining whether DNA																							
PT	PT	amplified from a biological sample encodes a portion of variant toll																							
PT	PT	receptor 4.																							
PS	XX	Example 1; Page 31; 97pp; English.																							
XX	XX	The invention relates to human toll receptor 4 (TLR4) nucleic acid and																							
CC	CC	methods to identify polymorphisms at the human TLR4 locus and to identify																							
CC	CC	individuals at risk of, or having, an indication associated with altered																							
CC	CC	innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic																							
CC	CC	reagent for detecting a polymorphism in human TLR4 gene. Since the																							
CC	CC	presence of TLR4 mutation is associated with gram-negative sepsis,																							
CC	CC	severity of sepsis, pre-term delivery and respiratory distress syndrome																							
CC	CC	in pre-term infants, agents which alter TLR4 activity are useful for																							
CC	CC	preventing or ameliorating infection by gram-negative bacteria, sepsis																							
CC	CC	induced by gram-negative bacteria, LPS (lipopolysaccharide) induced																							
CC	CC	chronic airway disease, asthma, arthritis, local and systemic																							
CC	CC	inflammatory disease conditions such as systematic inflammatory response																							
CC	CC	syndrome (SIRS) or acute respiratory distress syndrome (ARDS),																							
CC	CC	pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic																							
CC	CC	obstructive pulmonary disease, local gram-negative bacterial infection																							
CC	CC	and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for																							
CC	CC	amplifying the exons of human TLR4 gene																							
XX	XX	Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;																							
Query Match 0.5%; Score 20; DB 1; Length 20;																									
Best Local Similarity 100.0%; Pred. No. 73;																									
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;																									
QY	2351	AAGCCGAAAGGTGATTGTTG	2370																						

Db	1	AAGCCGAAGGTGATTGTTG	20									
RESULT 50												
AAC84824												
ID	AAC84824	standard; DNA; 20 BP.										
XX	AC	AAC84824;										
XX	XX	20-APR-2001 (first entry)										
DT	XX	Forward primer derived from human TLR4 gene exon 1.										
DE	XX											
XX	XX	TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;										
KW	KW	respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;										
KW	KW	chronic airway disease; arthritis; inflammatory disease; SIRS; human;										
KW	KW	systemic inflammatory response syndrome; pyelonephritis; bronchitis;										
KW	KW	acute respiratory distress syndrome; gall bladder disease; pneumonia;										
KW	KW	cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.										
XX	XX											
OS	XX	Homo sapiens.										
XX	XX	WO200077204-A1.										
XX	XX	21-DEC-2000.										
PF	XX	08-JUN-2000; 2000WO-US015723.										
XX	XX	10-JUN-1999; 99US-00329515.										
XX	XX	(IOWA) UNIV IOWA RES FOUND.										
PA	PA	(LORENZ) LORENZ E.										
XX	XX	Lorenz E, Schwartz DA, Schutte BC;										
PI	XX	WPI; 2001-061872/07.										
XX	XX	Identifying humans at risk of, or having indication associated with										
PT	PT	altered innate immunity involves detecting or determining whether DNA										
PT	PT	amplified from a biological sample encodes a portion of variant toll										
PT	PT	receptor 4.										
XX	XX	Example 1; Page 33; 97pp; English.										
PS	XX	The invention relates to human toll receptor 4 (TLR4) nucleic acid and										
CC	CC	methods to identify polymorphisms at the human TLR4 locus and to identify										
CC	CC	individuals at risk of, or having, an indication associated with altered										
CC	CC	innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic										
CC	CC	reagent for detecting a polymorphism in human TLR4 gene. Since the										
CC	CC	presence of TLR4 mutation is associated with gram-negative sepsis,										
CC	CC	severity of sepsis, pre-term delivery and respiratory distress syndrome										
CC	CC	in pre-term infants, agents which alter TLR4 activity are useful for										
CC	CC	preventing or ameliorating infection by gram-negative bacteria, sepsis										
CC	CC	induced by gram-negative bacteria, LPS (lipopolysaccharide) induced										
CC	CC	chronic airway disease, asthma, arthritis, local and systemic										
CC	CC	inflammatory disease conditions such as systematic inflammatory response										
CC	CC	syndrome (SIRS) or acute respiratory distress syndrome (ARDS),										
CC	CC	pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic										
CC	CC	obstructive pulmonary disease, local gram-negative bacterial infection										
CC	CC	and cystic fibrosis. The present sequence represents a forward primer										
CC	CC	derived from exon 1 of the human TLR4 gene, used in multi-tissue cDNA										
CC	CC	expression screen										
XX	XX	Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;										
QY	15	GCTCAGAGGAGGAGGAGGA	34									
Db	1	GCTCAGAGGAGGAGGAGGA	20									
				Query Match 0.5%; Score 20; DB 1; Length 20;								
				Best Local Similarity 100.0%; Pred. No. 73;								
				Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;								

```

RESULT 51
AAC84780
ID AAC84780 standard; DNA; 20 BP.
XX
XX
AC AAC84780;
XX
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systemic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA ) UNIV IOWA RES FOUND.
PA (LORENZ ) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
XX
PS Example 1; Page 31; 97pp; English.
XX
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 557 GGTGGCTGTGGAGCAAAATC 576
Db 1 GGTGGCTGTGGAGCAAAATC 20

```

RESULT 52

```

AAC84815/c
ID AAC84815 standard; DNA; 20 BP.
XX
XX
AC AAC84815;
XX
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systemic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA ) UNIV IOWA RES FOUND.
PA (LORENZ ) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
DR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
XX
PS Example 1; Page 31; 97pp; English.
XX
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2074 CGGTCTTCAGTGTGCTTGTA 2093
Db 20 CGGTCTTCAGTGTGCTTGTA 1

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RESULT 53

AAC84816/c
ID AAC84816 standard; DNA; 20 BP.
XX

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AC AAC84816;
DT 20-APR-2001 (first entry)
DE Human TLR4 gene exon 4 amplifying reverse primer.
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
OS Homo sapiens.
PN WO200077204-A1.
XX 21-DEC-2000.
PD 08-JUN-2000; 2000WO-US015723.
PF 10-JUN-1999; 99US-00329515.
PR (IOWA ) UNIV IOWA RES FOUND.
XX (LORENZ ) LORENZ E.
PA Lorenz E, Schwartz DA, Schutte BC;
PI WPI; 2001-061872/07.
XX Identifying humans at risk of, or having indication associated with
XX altered innate immunity involves detecting or determining whether DNA
XX amplified from a biological sample encodes a portion of variant toll
XX receptor 4.
PS Example 1; Page 31; 97pp; English.
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2142 CTCTTGGCTGGCTGCATAA 2161
DB 20 CTCTTGGCTGGCTGCATAA 1

RESULT 54
AAC84819/C
ID AAC84819 standard; DNA; 20 BP.
XX
AC AAC84819;
XX
DE 20-APR-2001 (first entry)
XX

Human TLR4 gene exon 4 amplifying reverse primer.
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
XX chronic airway disease; arthritis; inflammatory disease; SIRS; human;
XX systematic inflammatory response syndrome; pyelonephritis; bronchitis;
XX acute respiratory distress syndrome; gall bladder disease; pneumonia;
XX cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
OS Homo sapiens.
PN WO200077204-A1.
XX 21-DEC-2000.
PD 08-JUN-2000; 2000WO-US015723.
PF 10-JUN-1999; 99US-00329515.
PR (IOWA ) UNIV IOWA RES FOUND.
XX (LORENZ ) LORENZ E.
PA Lorenz E, Schwartz DA, Schutte BC;
PI WPI; 2001-061872/07.
XX Identifying humans at risk of, or having indication associated with
XX altered innate immunity involves detecting or determining whether DNA
XX amplified from a biological sample encodes a portion of variant toll
XX receptor 4.
PS Example 1; Page 31; 97pp; English.
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2484 GTGGAGAGACCCCTGCTCAG 2503
DB 20 GTGGAGAGACCCCTGCTCAG 1

RESULT 55
AAC84794
ID AAC84794 standard; DNA; 20 BP.
XX
AC AAC84794;
XX
DE 20-APR-2001 (first entry)
XX
Human TLR4 gene exon 4 amplifying forward primer.
XX

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TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis; respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS; chronic airway disease; arthritis; inflammatory disease; SIRS; human; systematic inflammatory response syndrome; pyelonephritis; bronchitis; acute respiratory distress syndrome; gall bladder disease; pneumonia; cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

Homo sapiens.

WO200077204-A1.

21-DEC-2000.

08-JUN-2000; 2000WO-US015723.

10-JUN-1999; 99US-00329515.

(IOWA) UNIV IOWA RES FOUND.

(LORENZ) LORENZ E.

Lorenz E, Schwartz DA, Schutte BC; WPI; 2001-061872/07.

Identifying humans at risk of, or having indication associated with altered innate immunity involves detecting or determining whether DNA amplified from a biological sample encodes a portion of variant toll receptor 4.

Example 1; Page 31; 97pp; English.

The invention relates to human toll receptor 4 (TLR4) nucleic acid and methods to identify polymorphisms at the human TLR4 locus and to identify individuals at risk of, or having, an indication associated with altered innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic reagent for detecting a polymorphism in human TLR4 gene. Since the presence of TLR4 mutation is associated with gram-negative sepsis, severity of sepsis, pre-term delivery and respiratory distress syndrome in pre-term infants, agents which alter TLR4 activity are useful for preventing or ameliorating infection by gram-negative bacteria, sepsis induced by gram-negative bacteria, LPS (lipopolysaccharide) induced chronic airway disease, asthma, arthritis, local and systemic inflammatory disease conditions such as systematic inflammatory response syndrome (SIRS) or acute respiratory distress syndrome (ARDS), pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic obstructive pulmonary disease, local gram-negative bacterial infection and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for amplifying the exons of human TLR4 gene

Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2210 CCAGGATGAGGACTGGTAA 2229
|||||

DB 1 CCAGGATGAGGACTGGTAA 20
|||||

RESULT 56
AAC84797

ID AAC84797 standard; DNA; 20 BP.

XX AAC84797;

AC AAC84797;

DT 20-APR-2001 (first entry)

DE Human TLR4 gene exon 4 amplifying forward primer.

TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis; respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS; chronic airway disease; arthritis; inflammatory disease; SIRS; human; acute respiratory distress syndrome; gall bladder disease; pneumonia; cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

systematic inflammatory response syndrome; pyelonephritis; bronchitis; acute respiratory distress syndrome; gall bladder disease; pneumonia; cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

Homo sapiens.

WO200077204-A1.

21-DEC-2000.

08-JUN-2000; 2000WO-US015723.

10-JUN-1999; 99US-00329515.

(IOWA) UNIV IOWA RES FOUND.

(LORENZ) LORENZ E.

Lorenz E, Schwartz DA, Schutte BC; WPI; 2001-061872/07.

Identifying humans at risk of, or having indication associated with altered innate immunity involves detecting or determining whether DNA amplified from a biological sample encodes a portion of variant toll receptor 4.

Example 1; Page 31; 97pp; English.

The invention relates to human toll receptor 4 (TLR4) nucleic acid and methods to identify polymorphisms at the human TLR4 locus and to identify individuals at risk of, or having, an indication associated with altered innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic reagent for detecting a polymorphism in human TLR4 gene. Since the presence of TLR4 mutation is associated with gram-negative sepsis, severity of sepsis, pre-term delivery and respiratory distress syndrome in pre-term infants, agents which alter TLR4 activity are useful for preventing or ameliorating infection by gram-negative bacteria, sepsis induced by gram-negative bacteria, LPS (lipopolysaccharide) induced chronic airway disease, asthma, arthritis, local and systemic inflammatory disease conditions such as systematic inflammatory response syndrome (SIRS) or acute respiratory distress syndrome (ARDS), pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic obstructive pulmonary disease, local gram-negative bacterial infection and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for amplifying the exons of human TLR4 gene

Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2467 TCATTGCTCTCAGAGGTG 2486
|||||

DB 1 TCATTGCTCTCAGAGGTG 20
|||||

RESULT 57
AAC84809/c

ID AAC84809 standard; DNA; 20 BP.

XX AAC84809;

AC AAC84809;

DT 20-APR-2001 (first entry)

DE Human TLR4 gene exon 4 amplifying reverse primer.

TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis; respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS; chronic airway disease; arthritis; inflammatory disease; SIRS; human; systematic inflammatory response syndrome; pyelonephritis; bronchitis; acute respiratory distress syndrome; gall bladder disease; pneumonia; cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.

```

XX OS Homo sapiens.
XX PN WO200077204-A1.
XX PD 21-DEC-2000.
XX PF 08-JUN-2000; 2000WO-US015723.
XX PR 10-JUN-1999; 99US-00329515.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (LORENZ ) LORENZ E.
XX PI Lorenz E, Schwartz DA, Schutte BC;
XX DR WPI; 2001-061872/07.
XX PT Identifying humans at risk of, or having indication associated with
XX PT altered innate immunity involves detecting or determining whether DNA
XX PT amplified from a biological sample encodes a portion of variant toll
XX PT receptor 4.
XX PS Example 1; Page 31; 97pp; English.
XX CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
XX CC methods to identify polymorphisms at the human TLR4 locus and to identify
XX CC individuals at risk of, or having, an indication associated with altered
XX CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
XX CC reagent for detecting a polymorphism in human TLR4 gene. Since the
XX CC presence of TLR4 mutation is associated with gram-negative sepsis,
XX CC severity of sepsis, pre-term delivery and respiratory distress syndrome
XX CC in pre-term infants, agents which alter TLR4 activity are useful for
XX CC preventing or ameliorating infection by gram-negative bacteria, sepsis
XX CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
XX CC chronic airway disease, asthma, arthritis, local and systemic
XX CC inflammatory disease conditions such as systematic inflammatory response
XX CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
XX CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
XX CC obstructive pulmonary disease, local gram-negative bacterial infection
XX CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
XX CC amplifying the exons of human TLR4 gene
XX SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1351 TTGGGACACCGCCTAAAG 1370
Db 20 TTGGGACACCGCCTAAAG 1

RESULT 58
AAC84811/C
ID AAC84811 standard; DNA; 20 BP.
XX AC AAC84811;
XX AC AAC84811;
XX DT 20-APR-2001 (first entry)
XX DE Human TLR4 gene exon 4 amplifying reverse primer.
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
XX chronic airway disease; arthritis; inflammatory disease; SIRS; human;
XX systematic inflammatory response syndrome; pyelonephritis; bronchitis;
XX acute respiratory distress syndrome; gall bladder disease; pneumonia;
XX cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200077204-A1.
XX PD 21-DEC-2000.
XX PF 08-JUN-2000; 2000WO-US015723.
XX PR 10-JUN-1999; 99US-00329515.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (LORENZ ) LORENZ E.
XX PI Lorenz E, Schwartz DA, Schutte BC;
XX DR WPI; 2001-061872/07.
XX PT Identifying humans at risk of, or having indication associated with
XX PT altered innate immunity involves detecting or determining whether DNA
XX PT amplified from a biological sample encodes a portion of variant toll
XX PT receptor 4.
XX PS Example 1; Page 31; 97pp; English.
XX CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
XX CC methods to identify polymorphisms at the human TLR4 locus and to identify
XX CC individuals at risk of, or having, an indication associated with altered
XX CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
XX CC reagent for detecting a polymorphism in human TLR4 gene. Since the
XX CC presence of TLR4 mutation is associated with gram-negative sepsis,
XX CC severity of sepsis, pre-term delivery and respiratory distress syndrome
XX CC in pre-term infants, agents which alter TLR4 activity are useful for
XX CC preventing or ameliorating infection by gram-negative bacteria, sepsis
XX CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
XX CC chronic airway disease, asthma, arthritis, local and systemic
XX CC inflammatory disease conditions such as systematic inflammatory response
XX CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
XX CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
XX CC obstructive pulmonary disease, local gram-negative bacterial infection
XX CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
XX CC amplifying the exons of human TLR4 gene
XX SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1568 TGGCTTGTCACGCTCTCGAAG 1587
Db 20 TGGCTTGTCACGCTCTCGAAG 1

RESULT 59
AAC84788
ID AAC84788 standard; DNA; 20 BP.
XX AC AAC84788;
XX AC AAC84788;
XX DT 20-APR-2001 (first entry)
XX DE Human TLR4 gene exon 4 amplifying forward primer.
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
XX chronic airway disease; arthritis; inflammatory disease; SIRS; human;
XX systematic inflammatory response syndrome; pyelonephritis; bronchitis;
XX acute respiratory distress syndrome; gall bladder disease; pneumonia;
XX cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200077204-A1.
XX PD 21-DEC-2000.

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XX 08-JUN-2000; 2000WO-US015723.
PF (IOWA ) UNIV IOWA RES FOUND.
PR 10-JUN-1999; 99US-00329515.
XX (LORENZ ) LORENZ E.
PA (IOWA ) UNIV IOWA RES FOUND.
XX (LORENZ ) LORENZ E.
PI Lorenz E, Schwartz DA, Schutte BC;
XX WPI; 2001-061872/07.
DR Identifying humans at risk of, or having indication associated with
XX altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX Example 1; Page 31; 97pp; English.
PS The invention relates to human toll receptor 4 (TLR4) nucleic acid and
XX methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC bronchopneumonitis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1541 CAGAGTTGCTTCAATGGCA 1560
DB |||||||
1 CAGAGTTGCTTCAATGGCA 20

RESULT 60
AAC84793
ID AAC84793 standard; DNA; 20 BP.
XX AAC84793;
AC AAC84793;
XX 20-APR-2001 (first entry)
DT Human TLR4 gene exon 4 amplifying forward primer.
DE TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX Homo sapiens.
OS WO200077204-A1.
XX PN 21-DEC-2000.
XX PD 08-JUN-2000; 2000WO-US015723.
XX PF 10-JUN-1999; 99US-00329515.
XX PR (IOWA ) UNIV IOWA RES FOUND.
XX PA

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PR 10-JUN-1999; 99US-00329515.
XX (IOWA ) UNIV IOWA RES FOUND.
PA (LORENZ ) LORENZ E.
XX Lorenz E, Schwartz DA, Schutte BC;
XX WPI; 2001-061872/07.
DR Identifying humans at risk of, or having indication associated with
XX altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX Example 1; Page 31; 97pp; English.
PS The invention relates to human toll receptor 4 (TLR4) nucleic acid and
XX methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC bronchopneumonitis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2074 CGGTCCTCAGTGTGCTTGTGA 2093
DB |||||||
1 CGGTCCTCAGTGTGCTTGTGA 20

RESULT 61
AAC84817/C
ID AAC84817 standard; DNA; 20 BP.
XX AAC84817;
AC AAC84817;
XX 20-APR-2001 (first entry)
DT Human TLR4 gene exon 4 amplifying reverse primer.
DE TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX Homo sapiens.
OS WO200077204-A1.
XX PN 21-DEC-2000.
XX PD 08-JUN-2000; 2000WO-US015723.
XX PF 10-JUN-1999; 99US-00329515.
XX PR (IOWA ) UNIV IOWA RES FOUND.
XX PA

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PA (LORENZ/) LORENZ E.
XX Lorenz E, Schwartz DA, Schutte BC;
XX WPI; 2001-061872/07.
DR
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
XX Example 1; Page 31; 97pp; English.
XX
XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2250 TTAGAGAGGGGTGCTCC 2269
DB 20 TTAGAGAGGGGTGCTCC 1

RESULT 62
AAC84814/c
ID AAC84814 standard; DNA; 20 BP.
AC
AC AAC84814;
XX
XX
XX 20-APR-2001 (first entry)
XX
XX Human TLR4 gene exon 4 amplifying reverse primer.
XX
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200077204-A1.
XX
XX 21-DEC-2000.
XX
XX 08-JUN-2000; 2000WO-US015723.
XX
XX 10-JUN-1999; 99US-00329515.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX (LORENZ/) LORENZ E.
XX
XX Lorenz E, Schwartz DA, Schutte BC;

XX WPI; 2001-061872/07.
XX
XX Identifying humans at risk of, or having indication associated with
XX altered innate immunity involves detecting or determining whether DNA
XX amplified from a biological sample encodes a portion of variant toll
XX receptor 4.
XX
XX Example 1; Page 31; 97pp; English.
XX
XX The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene
XX
SQ Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1947 AAGGACGACGAGCGACTCTT 1966
DB 20 AAGGACGACGAGCGACTCTT 1

RESULT 63
AAC84772
ID AAC84772 standard; DNA; 20 BP.
XX
XX AAC84772;
XX
XX 20-APR-2001 (first entry)
XX
XX Human TLR4 gene amplifying primer 1F.
XX
XX TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200077204-A1.
XX
XX 21-DEC-2000.
XX
XX 08-JUN-2000; 2000WO-US015723.
XX
XX 10-JUN-1999; 99US-00329515.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX (LORENZ/) LORENZ E.
XX
XX Lorenz E, Schwartz DA, Schutte BC;
XX
XX WPI; 2001-061872/07.
XX

PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 29; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systemic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84772-775 represent PCR primers for
CC amplifying the human TLR4 gene
XX
SQ Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 448 ATGGGGCATATCAGAGCCTA 467
DB 1 ATGGGGCATATCAGAGCCTA 20
|||||
RESULT 64
AAL41015
ID AAL41015 standard; DNA; 20 BP.
XX
AC AAL41015;
XX
DT 11-OCT-2002 (first entry)
XX
DE Anti-CD14 monoclonal antibody related oligonucleotide #3.
XX
KW Immunosuppressive; antibacterial; anti-CD14 antibody; epitope; sepsis;
KW human CD14; ds.
XX
OS Unidentified.
XX
PN WO200242333-A1.
XX
PD 30-MAY-2002.
XX
PF 28-SEP-2001; 2001WO-JP008563.
XX
PR 22-NOV-2000; 2000JP-00356719.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
XX
PI Furusako S, Shirakawa K, Mori S;
XX
DR WPI; 2002-454920/48.
XX
PT Anti-CD14 monoclonal antibody which inhibits CD14/T lymphocyte receptor
PT binding by specifically recognizing epitope in human CD14 domain to
PT prevent interaction and suppress cell activation, useful for treating
PT sepsis.
XX
PS Example 2; Page 46; 156pp; Japanese.
XX
CC The invention relates to an anti-CD14 antibody which can specifically

CC recognise an epitope containing a part of a domain with not less than 8
CC amino acids in human CD14 in the region from positions 269-315 in a fully
CC defined sequence of 356 amino acids as given in the specification. The
CC antibody is useful in drug compositions for treating sepsis and for
CC screening remedies for sepsis. This polynucleotide sequence represents
CC anti-CD14 related oligonucleotide of the invention
XX
SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 501 CCCATCCAGAGTTTACCCCT 520
DB 1 CCCATCCAGAGTTTACCCCT 20
|||||
RESULT 65
ADB39124
ID ADB39124 standard; DNA; 20 BP.
XX
AC ADB39124;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human toll-like receptor (TLR) -4 RT-PCR primer Seq ID3.
XX
KW vascular disease; Toll-like receptor-4 inhibitor; TLR-4 inhibitor;
KW atherosclerosis; restenosis; inflammation; vasotropic;
KW antiatherosclerotic; thrombolytic; cardiant; antiinflammatory;
KW antisense therapy; gene therapy; transplant atherosclerosis;
KW vein-graft atherosclerosis; thrombosis; stent restenosis;
KW angioplasty restenosis; heart disease; PCR; primer;
KW reverse transcription polymerase chain reaction; RT-PCR; human; ss;
KW TLR-4; Toll-like receptor 4.
XX
OS Homo sapiens.
XX
PN US2003077279-A1.
XX
PD 24-APR-2003.
XX
PF 23-APR-2002; 2002US-00128166.
XX
PR 24-OCT-2001; 2001US-0335637P.
PR 17-DEC-2001; 2001US-0341359P.
XX
PA (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI Arditi M, Rajavashisth T, Shah PK;
XX
DR WPI; 2003-615988/58.
XX
PT Treating a vascular disease, particularly atherosclerosis, thrombosis,
PT restenosis, stent restenosis or angioplasty restenosis, by administering
PT a Toll-like receptor-4 (TLR-4) inhibitor to a mammal.
XX
PS Example 6; Page 10; 21pp; English.
XX
CC This invention relates to a novel method for the treatment of a vascular
CC disease through the administration of a Toll-like receptor-4 (TLR-4)
CC inhibitor to a mammal. The TLR-4 protein has been linked to several
CC disease such as atherosclerosis, restenosis, inflammation and other
CC vascular diseases. Compounds which inhibit the activity of TLR-4, through
CC the inhibition of its receptor, may have vasotropic,
CC antiatherosclerotic, thrombolytic, cardiant and antiinflammatory
CC activities. This may also be achieved through antisense therapy or gene
CC therapy. The method or the system of the invention may therefore be
CC useful for inhibiting or treating a vascular disease, for example
CC atherosclerosis, transplant atherosclerosis, vein-graft atherosclerosis,
CC thrombosis, restenosis, stent restenosis, angioplasty restenosis, or
CC inflammation and other heart disease. The present sequence is that of a

CC PCR primer which was used for reverse transcription polymerase chain
CC reaction amplification of human TLR-4 in the exemplification of the
CC invention.
XX
SQ Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1768 TGGATACGTTTCCTTATAAG 1787
Db 1 TGGATACGTTTCCTTATAAG 20
RESULT 66
ADFI7208
ID ADF17208 standard; DNA; 20 BP.
XX
AC ADF17208;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human toll-like receptor 4 (TLR4) gene PCR primer #2.
XX
KW therapeutic agent; endothelial disorder; 3-amino-1;
KW 2-benzisothiazole compound; endothelial disorders; toxemia;
KW severe toxemia; toxic shock; haemorrhagic shock;
KW alcohol induced cirrhosis; adult respiratory distress syndrome;
KW chronic rheumatoid arthritis; ulcerative gastritis; Crohn's disease;
KW glomerulonephritis; infectious carditis; systemic lupus erythematosus;
KW scleroderma; Sjogren's syndrome; multiple organ failure;
KW autoimmune disease; multiple sclerosis; PCR; primer; ss; human;
KW toll-like receptor 4; TLR4.
XX
OS Homo sapiens.
XX
PN WO2003087072-A1.
XX
PD 23-OCT-2003.
XX
PF 31-MAR-2003; 2003WO-JP004108.
XX
PR 29-MAR-2002; 2002JP-00132121.
XX
PA (MOCH) MOCHIDA PHARM CO LTD.
XX
PI Furusako S, Satoh T, Nakamura M, Mizuno M, Mori S;
XX
DR WPI; 2003-903121/82.
XX
PT Agents for treating diseases associated with endothelial disorders,
PT toxemia or toll like receptor signaling comprise new or known 3-amino-1,2
PT -benzisothiazole compounds.
XX
PS Example 4; SEQ ID NO 5; 180pp; Japanese.
XX
CC The invention comprises therapeutic agents for preventing or treating
CC diseases associated with endothelial disorders, the agents contain a 3-
CC amino-1,2-benzisothiazole compound. The therapeutic agents of the
CC invention are useful for preventing/treating: diseases associated with
CC endothelial disorders, toxemia, severe toxemia, toxic shock,
CC haemorrhagic shock, alcohol induced cirrhosis, adult respiratory distress
CC syndrome, chronic rheumatoid arthritis, ulcerative gastritis, Crohn's
CC disease, glomerulonephritis, infectious carditis, systemic lupus
CC erythematosus, scleroderma, Sjogren's syndrome, multiple organ failure
CC or autoimmune diseases (e.g. multiple sclerosis). The present DNA
CC sequence represents a PCR primer that was used in the exemplification of
CC the invention.
XX
SQ Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 501 CCCATCCAGAGTTTAGCCCT 520
Db 1 CCCATCCAGAGTTTAGCCCT 20
RESULT 67
ADIS3114
ID ADI53114 standard; DNA; 20 BP.
XX
AC ADI53114;
XX
DT 22-APR-2004 (first entry)
XX
DE Human Toll-like receptor 4 TLR-4 RT-PCR primer #1.
XX
KW ss; RT-PCR; reverse transcriptase; primer;
KW myeloid differentiation factor 88; MyD88; atherosclerosis; thrombosis;
KW restenosis; angina pectoris; ischaemia; stroke; heart attack;
KW osteonecrosis; colitis; poor kidney function; congestive heart failure;
KW poor blood circulation; slow wound healing; inflammation; infection;
KW claudication; Toll-like receptor 4; TLR-4; human.
XX
OS Homo sapiens.
XX
PN US2003148986-A1.
XX
PD 07-AUG-2003.
XX
PF 12-DEC-2002; 2002US-00317992.
XX
PR 17-DEC-2001; 2001US-0341359P.
PR 23-APR-2002; 2002US-00128166.
XX
PA (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI Arditi M, Rajavashisth T, Shah PK;
XX
DR WPI; 2003-897598/82.
XX
PT A system for inhibiting the biological activity of myeloid
PT differentiation factor 88 (MyD88), useful for treating vascular diseases
PT (e.g. atherosclerosis), comprises an intravascular device and MyD88
PT inhibitor coated on the device.
XX
PS Example 6; SEQ ID NO 3; 18pp; English.
XX
CC The invention relates to a system for inhibiting the biological activity
CC of myeloid differentiation factor 88 (MyD88) which comprises an
CC intravascular device and a therapeutic composition coated upon the
CC intravascular device, the composition comprising a MyD88 inhibitor. The
CC system or method is useful for treating vascular diseases including
CC atherosclerosis, transplant atherosclerosis, vein-graft atherosclerosis,
CC thrombosis, restenosis, stent restenosis or angioplasty restenosis. It
CC can be used for treating patients suffering from angina pectoris,
CC ischaemias, conditions associated with ischaemias including stroke,
CC transient ischaemic attacks, heart attack, osteonecrosis, colitis, poor
CC kidney function or congestive heart failure, poor blood circulation to
CC the extremities and complications of poor blood circulation including
CC slow wound healing, inflammation, infections and claudication. The
CC present sequence represents a human Toll-like receptor 4 TLR-4 reverse
CC transcriptase (RT)-PCR primer.
XX
SQ Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1768 TGGATACGTTTCCTTATAAG 1787
|||||

Db 1 TCGATACGTTTCCTTATAAG 20

RESULT 68

ACC83590/c

ID ACC83590 standard; DNA; 20 BP.

XX AC ACC83590;

XX 08-SEP-2003 (first entry)

XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114646.

DE Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;

XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;

KW phosphorothioate; antisense; ss.

OS Homo sapiens.

XX Key Location/Qualifiers

FH modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "OTHER = phosphorothioate nucleotides, the oligonucleotide comprises a central gap region of 10 2'-deoxynucleotides, flanked on both sites by 5-nucleotides wings composed of 2'-methoxyethyl nucleotides"

FT modified_base 1

FT /tag= b

FT /mod_base= m5c

FT modified_base 2

FT /tag= c

FT /mod_base= m5c

FT modified_base 4

FT /tag= d

FT /mod_base= m5c

FT modified_base 7

FT /tag= e

FT /mod_base= m5c

FT modified_base 11

FT /tag= f

FT /mod_base= m5c

FT modified_base 13

FT /tag= g

FT /mod_base= m5c

FT modified_base 14

FT /tag= h

FT /mod_base= m5c

FT modified_base 18

FT /tag= i

FT /mod_base= m5c

XX WO2003044163-A2.

PN 30-MAY-2003.

XX 14-NOV-2002; 2002WO-US036390.

XX 19-NOV-2001; 2001US-00001863.

XX (ISIS-) ISIS PHARM INC.

XX Karraas JG, Koller E;

XX WPI; 2003-468766/44.

XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene expression, particularly useful for preventing, delaying or treating e.g. inflammatory disorders, or conditions involving Th1 or Th2 immune responses.

XX Claim 3; Page 95; 110pp; English.

XX The present sequence is that of antisense oligonucleotide ISIS #114646.

CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a deoxy gap, is targeted to the coding region of human Toll-like receptor 4 mRNA. It exhibits 85% inhibition of human Toll-like receptor 4 expression in THP-1 cells. It is useful for inhibiting the expression of Toll-like receptor 4 in cells or tissues. The oligonucleotide is particularly useful for treating or preventing a disease or condition associated with Toll-like receptor 4, e.g. an inflammatory disorder or a condition involving an immune response, particularly Th1 or Th2 responses

XX Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 73;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2354 CCGAAAGGTGATTGTTGGG 2373

DB 20 CCGAAAGGTGATTGTTGGG 1

RESULT 69

ACC83594/c

ID ACC83594 standard; DNA; 20 BP.

XX AC ACC83594;

XX 08-SEP-2003 (first entry)

XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114650.

DE Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;

KW phosphorothioate; antisense; ss.

OS Homo sapiens.

XX Key Location/Qualifiers

FH modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "OTHER = phosphorothioate nucleotides, the oligonucleotide comprises a central gap region of 10 2'-deoxynucleotides, flanked on both sites by 5-nucleotides wings composed of 2'-methoxyethyl nucleotides"

FT modified_base 8

FT /tag= b

FT /mod_base= m5c

FT modified_base 9

FT /tag= c

FT /mod_base= m5c

FT modified_base 10

FT /tag= d

FT /mod_base= m5c

FT modified_base 12

FT /tag= e

FT /mod_base= m5c

FT modified_base 13

FT /tag= f

FT /mod_base= m5c

XX WO2003044163-A2.

PN 30-MAY-2003.

XX 14-NOV-2002; 2002WO-US036390.

XX 19-NOV-2001; 2001US-00001863.

XX (ISIS-) ISIS PHARM INC.

XX Karraas JG, Koller E;

XX WPI; 2003-468766/44.

PT New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT expression, particularly useful for preventing, delaying or treating e.g.
PT inflammatory disorders, or conditions involving Th1 or Th2 immune
PT responses.
XX
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114650.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC receptor 4 mRNA. It exhibits 79% inhibition of human Toll-like receptor 4
CC expression in THP-1 cells. It is useful for inhibiting the expression of
CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC particularly useful for treating or preventing a disease or condition
CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC condition involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2884 TCTTCAGGTGGGCAATTTCA 2903
DB 20 TCTTCAGGTGGGCAATTTCA 1

RESULT 70
ACC83606/c
ID ACC83606 standard; DNA; 20 BP.
XX
XX ACC83606;
XX
XX 08-SEP-2003 (first entry)
XX
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114629.
DE
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
XX Homo sapiens.

Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 1
FT /*tag= b
FT /mod_base= m5c
FT modified_base 4
FT /*tag= c
FT /mod_base= m5c
FT modified_base 7
FT /*tag= d
FT /mod_base= m5c
FT modified_base 14
FT /*tag= e
FT /mod_base= m5c

WO2003044163-A2.
XX
XX 30-MAY-2003.
PD
XX 14-NOV-2002; 2002WO-US036390.
PF
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.

XX
PI Karas JG, Koller B;
XX
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT expression, particularly useful for preventing, delaying or treating e.g.
PT inflammatory disorders, or conditions involving Th1 or Th2 immune
PT responses.
XX
XX Example 14; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114629.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the 5' untranslated region of human Toll-like
CC receptor 4 mRNA. It exhibits 48% inhibition of human Toll-like receptor 4
CC expression in THP-1 cells. It is useful for inhibiting the expression of
CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC particularly useful for treating or preventing a disease or condition
CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC condition involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 225 CTCTTGCTAAATGCTGCCG 244
DB 20 CTCTTGCTAAATGCTGCCG 1

RESULT 71
ACC83611/c
ID ACC83611 standard; DNA; 20 BP.
XX
XX ACC83611;
XX
XX 08-SEP-2003 (first entry)
XX
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114638.
DE
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
XX Homo sapiens.

Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 4
FT /*tag= b
FT /mod_base= m5c
FT modified_base 5
FT /*tag= c
FT /mod_base= m5c
FT modified_base 8
FT /*tag= d
FT /mod_base= m5c
FT modified_base 13
FT /*tag= e
FT /mod_base= m5c
FT modified_base 14
FT /*tag= f
FT /mod_base= m5c
XX
XX WO2003044163-A2.

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XX PD 30-MAY-2003.
XX PF 14-NOV-2002; 2002WO-US036390.
XX PR 19-NOV-2001; 2001US-00001863.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Karras JG, Koller E;
XX WPI; 2003-468766/44.
XX DR
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Example 14; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114638.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the coding region of human Toll-like receptor 4
XX mRNA. It exhibits 11% inhibition of human Toll-like receptor 4 expression
XX in THP-1 cells. More active oligonucleotides are useful for inhibiting
XX the expression of Toll-like receptor 4 in cells or tissues. The
XX oligonucleotide is particularly useful for treating or preventing a
XX disease or condition associated with Toll-like receptor 4, e.g. an
XX inflammatory disorder or a condition involving an immune response,
XX particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 73;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1586 AGTCTTGAATAATGGCTGGCA 1605
DB |||||||
20 AGTCTTGAATAATGGCTGGCA 1

RESULT 72
ACC83584/c
ID ACC83584 standard; DNA; 20 BP.
XX
AC ACC83584;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114637.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= m5c
FT modified_base 4
FT /tag= b
FT /mod_base= m5c
FT modified_base 14
FT /tag= d

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FT modified_base 18 /mod_base= m5c
FT /tag= e
FT /mod_base= m5c
FT modified_base 19 /mod_base= m5c
FT /tag= f
FT /mod_base= m5c
FT modified_base 20 /mod_base= m5c
FT /tag= g
FT /mod_base= m5c
XX
XX WO2003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114637.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the coding region of human Toll-like receptor 4
XX mRNA. It exhibits 77% inhibition of human Toll-like receptor 4 expression
XX in THP-1 cells. It is useful for inhibiting the expression of Toll-like
XX receptor 4 in cells or tissues. The oligonucleotide is particularly
XX useful for treating or preventing a disease or condition associated with
XX Toll-like receptor 4, e.g. an inflammatory disorder or a condition
XX involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 73;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 998 GGGCTGTGCAATTGACCA 1017
DB |||||||
20 GGGCTGTGCAATTGACCA 1

RESULT 73
ACC83583/c
ID ACC83583 standard; DNA; 20 BP.
XX
AC ACC83583;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114633.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the

```


SQ Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2571 GGGCGGCACATCTTCTGGAG 2590
 |||||
 Db 20 GGGCGGCACATCTTCTGGAG 1

RESULT 75
 ACC83605/c
 ID ACC83605 standard; DNA; 20 BP.
 XX
 AC ACC83605;
 XX
 DT 08-SEP-2003 (first entry)
 XX
 DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114628.
 XX
 KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
 KW Phosphorothioate; antisense; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER = phosphorothioate nucleotides, the
 oligonucleotide comprises a central gap region of 10 2'-
 deoxynucleotides, flanked on both sites by 5-nucleotides
 wings composed of 2'-methoxyethyl nucleotides"
 FT modified_base 11
 FT /tag= b
 FT /mod_base= m5c
 FT modified_base 16
 FT /tag= c
 FT /mod_base= m5c
 FT modified_base 18
 FT /tag= d
 FT /mod_base= m5c
 FT modified_base 19
 FT /tag= e
 FT /mod_base= m5c
 XX
 PN WO200304163-A2.
 XX
 PD 30-MAY-2003.
 XX
 PF 14-NOV-2002; 2002WO-US036390.
 XX
 PR 19-NOV-2001; 2001US-00001863.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Karras JG, Koller E;
 XX
 DR WPI; 2003-468766/44.
 XX
 CC New antisense oligonucleotides for modulating Toll-like receptor 4 gene
 expression, particularly useful for preventing, delaying or treating e.g.
 inflammatory disorders, or conditions involving Th1 or Th2 immune
 responses.
 XX
 PS Example 14; Page 95; 110pp; English.
 XX
 CC The present sequence is that of antisense oligonucleotide ISIS #114628.
 CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
 CC deoxy gap, is targeted to the 5' untranslated region of human Toll-like
 CC receptor 4 mRNA. It exhibits 32% inhibition of human Toll-like receptor 4
 CC expression in THP-1 cells. It is useful for inhibiting the expression of

CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
 CC particularly useful for treating or preventing a disease or condition
 CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
 CC condition involving an immune response, particularly Th1 or Th2 responses
 XX
 SQ Sequence 20 BP; 3 A; 4 C; 10 G; 3 T; 0 U; 0 Other;
 Query Match 0.5%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 73;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 193 CGGAGCCTCAGCCCTTCACC 212
 |||||
 Db 20 CGGAGCCTCAGCCCTTCACC 1

RESULT 76
 ACC83608/c
 ID ACC83608 standard; DNA; 20 BP.
 XX
 AC ACC83608;
 XX
 DT 08-SEP-2003 (first entry)
 XX
 DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114634.
 XX
 KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
 KW Phosphorothioate; antisense; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER = phosphorothioate nucleotides, the
 oligonucleotide comprises a central gap region of 10 2'-
 deoxynucleotides, flanked on both sites by 5-nucleotides
 wings composed of 2'-methoxyethyl nucleotides"
 FT modified_base 9
 FT /tag= b
 FT /mod_base= m5c
 FT modified_base 12
 FT /tag= c
 FT /mod_base= m5c
 FT modified_base 14
 FT /tag= d
 FT /mod_base= m5c
 FT modified_base 15
 FT /tag= e
 FT /mod_base= m5c
 FT modified_base 19
 FT /tag= f
 FT /mod_base= m5c
 XX
 PN WO200304163-A2.
 XX
 PD 30-MAY-2003.
 XX
 PF 14-NOV-2002; 2002WO-US036390.
 XX
 PR 19-NOV-2001; 2001US-00001863.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Karras JG, Koller E;
 XX
 DR WPI; 2003-468766/44.
 XX
 CC New antisense oligonucleotides for modulating Toll-like receptor 4 gene
 expression, particularly useful for preventing, delaying or treating e.g.
 inflammatory disorders, or conditions involving Th1 or Th2 immune
 responses.

expression, particularly useful for preventing, delaying or treating e.g. inflammatory disorders, or conditions involving Th1 or Th2 immune responses.

Example 14; Page 95; 110pp; English.

The present sequence is that of antisense oligonucleotide ISIS #114635. This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a deoxy gap, is targeted to the coding region of human Toll-like receptor 4 mRNA. It exhibits 51% inhibition of human Toll-like receptor 4 expression in THP-1 cells. Such oligonucleotides are useful for inhibiting the expression of Toll-like receptor 4 in cells or tissues. The oligonucleotide is particularly useful for treating or preventing a disease or condition associated with Toll-like receptor 4, e.g. an inflammatory disorder or a condition involving an immune response, particularly Th1 or Th2 responses

Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 791 CCTGTCCCTGAACCCCTATGA 810
|||||
Dd 20 CCTGTCCCTGAACCCCTATGA 1

RESULT 78
ACC83596/c

ID ACC83596 standard; DNA; 20 BP.

AC ACC83596;

XX 08-SEP-2003 (first entry)

XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114652.

XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulatory;
KW phosphorothioate; antisense; ss.

XX Homo sapiens.

XX

Key Location/Qualifiers

FH 1. .20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER = phosphorothioate nucleotides, the oligonucleotide comprises a central gap region of 10 2'-deoxynucleotides, flanked on both sites by 5-nucleotides wings composed of 2'-methoxyethyl nucleotides"

FT modified_base 1

FT /*tag= b

FT /mod_base= m5c

FT modified_base 4

FT /*tag= c

FT /mod_base= m5c

FT modified_base 8

FT /*tag= d

FT /mod_base= m5c

FT modified_base 11

FT /*tag= e

FT /mod_base= m5c

FT modified_base 17

FT /*tag= f

FT /mod_base= m5c

FT modified_base 18

FT /*tag= g

FT /mod_base= m5c

FT modified_base 19

FT /*tag= h

FT /mod_base= m5c

FT modified_base 20

```

FT FT      /*tag= i
XX FT      /mod_base= m5c
PN WO2003044163-A2.
XX PD      30-MAY-2003.
XX PF      14-NOV-2002; 2002WO-US036390.
XX PR      19-NOV-2001; 2001US-00001863.
XX PA      (ISIS-) ISIS PHARM INC.
XX PI      Karras JG, Koller E;
XX DR      WPI; 2003-468766/44.
XX
PT New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT expression, particularly useful for preventing, delaying or treating e.g.
PT inflammatory disorders, or conditions involving Th1 or Th2 immune
PT responses.
XX
PS Claim 3; Page 95; 110pp; English.
XX
CC The present sequence is that of antisense oligonucleotide ISIS #114652.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC receptor 4 mRNA. It exhibits 85% inhibition of human Toll-like receptor 4
CC expression in THP-1 cells. It is useful for inhibiting the expression of
CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC particularly useful for treating or preventing a disease or condition
CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match      0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3144 GGGGCTCTGTGATGCAAGATG 3163
Db      |||||
        20 GGGGCTCTGTGATGCAAGATG 1

RESULT 79
ACCC83603/c
ID ACC83603 standard; DNA; 20 BP.
XX
AC ACC83603;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114626.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sides by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 3
FT /*tag= b
FT /mod_base= m5c
FT modified_base 9
FT /*tag= c

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```

FT modified_base 10
FT /*tag= d
FT /mod_base= m5c
FT modified_base 11
FT /*tag= e
FT /mod_base= m5c
FT modified_base 14
FT /*tag= f
FT /mod_base= m5c
FT modified_base 15
FT /*tag= g
FT /mod_base= m5c
FT modified_base 19
FT /*tag= h
FT /mod_base= m5c
XX
XX WO2003044163-A2.
XX PD      30-MAY-2003.
XX PF      14-NOV-2002; 2002WO-US036390.
XX PR      19-NOV-2001; 2001US-00001863.
XX PA      (ISIS-) ISIS PHARM INC.
XX PI      Karras JG, Koller E;
XX DR      WPI; 2003-468766/44.
XX
PT New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT expression, particularly useful for preventing, delaying or treating e.g.
PT inflammatory disorders, or conditions involving Th1 or Th2 immune
PT responses.
XX
XX Example 14; Page 95; 110pp; English.
XX
CC The present sequence is that of antisense oligonucleotide ISIS #114626.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the 5' untranslated region of human Toll-like
CC receptor 4 mRNA. It exhibits 35% inhibition of human Toll-like receptor 4
CC expression in THP-1 cells. It is useful for inhibiting the expression of
CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC particularly useful for treating or preventing a disease or condition
CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC condition involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

Query Match      0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 60 CGCTGTGGCTGGGACTCTGAT 79
Db      |||||
        20 CGCTGTGGCTGGGACTCTGAT 1

RESULT 80
ACCC83588/c
ID ACC83588 standard; DNA; 20 BP.
XX
AC ACC83588;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114643.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.

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```

XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = phosphorothioate nucleotides, the
XX FT oligonucleotide comprises a central gap region of 10 2'-
XX FT deoxynucleotides, flanked on both sites by 5-nucleotides
XX FT wings composed of 2'-methoxyethyl nucleotides"
XX FT 2
XX FT modified_base
XX FT /*tag= b
XX FT /mod_base= m5c
XX FT modified_base 5
XX FT /*tag= c
XX FT /mod_base= m5c
XX FT modified_base 6
XX FT /*tag= d
XX FT /mod_base= m5c
XX FT modified_base 9
XX FT /*tag= e
XX FT /mod_base= m5c
XX FT modified_base 16
XX FT /*tag= f
XX FT /mod_base= m5c
XX FT modified_base 19
XX FT /*tag= g
XX FT /mod_base= m5c
XX FT
XX FT WO2003044163-A2.
XX PN
XX PD 30-MAY-2003.
XX PP 14-NOV-2002; 2002WO-US036390.
XX PR 19-NOV-2001; 2001US-00001863.
XX PX (ISIS-) ISIS PHARM INC.
XX PI Karras JG, Koller E;
XX XX WPI; 2003-468766/44.
XX DR
XX PT New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX PT expression, particularly useful for preventing, delaying or treating e.g.
XX PT inflammatory disorders, or conditions involving Th1 or Th2 immune
XX PT responses.
XX PS Claim 3; Page 95; 110pp; English.
XX CC The present sequence is that of antisense oligonucleotide ISIS #114643.
XX CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX CC deoxy gap, is targeted to the coding region of human Toll-like receptor 4
XX CC mRNA. It exhibits 86% inhibition of human Toll-like receptor 4 expression
XX CC in THP-1 cells. It is useful for inhibiting the expression of Toll-like
XX CC receptor 4 in cells or tissues. The oligonucleotide is particularly
XX CC useful for treating or preventing a disease or condition associated with
XX CC Toll-like receptor 4, e.g. an inflammatory disorder or a condition
XX CC involving an immune response, particularly Th1 or Th2 responses
XX SQ Sequence 20 BP; 8 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2137 TGATGCTTCTTGTGCTGC 2156
Db |||||
20 TGATGCTTCTTGTGCTGC 1

RESULT 81
ACC83597/c
ID ACC83597 standard; DNA; 20 BP.

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XX AC ACC83597;
XX XX 08-SEP-2003 (first entry)
XX DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114653.
XX KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
XX KW phosphorothioate; antisense; ss.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = phosphorothioate nucleotides, the
XX FT oligonucleotide comprises a central gap region of 10 2'-
XX FT deoxynucleotides, flanked on both sites by 5-nucleotides
XX FT wings composed of 2'-methoxyethyl nucleotides"
XX FT 7
XX FT modified_base
XX FT /*tag= b
XX FT /mod_base= m5c
XX FT modified_base 8
XX FT /*tag= c
XX FT /mod_base= m5c
XX FT modified_base 9
XX FT /*tag= d
XX FT /mod_base= m5c
XX FT modified_base 10
XX FT /*tag= e
XX FT /mod_base= m5c
XX FT modified_base 11
XX FT /*tag= f
XX FT /mod_base= m5c
XX FT modified_base 18
XX FT /*tag= g
XX FT /mod_base= m5c
XX FT
XX PN WO2003044163-A2.
XX XX 30-MAY-2003.
XX PD
XX XX 14-NOV-2002; 2002WO-US036390.
XX PF
XX XX 19-NOV-2001; 2001US-00001863.
XX PR (ISIS-) ISIS PHARM INC.
XX PX Karras JG, Koller E;
XX XX WPI; 2003-468766/44.
XX DR
XX PT New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX PT expression, particularly useful for preventing, delaying or treating e.g.
XX PT inflammatory disorders, or conditions involving Th1 or Th2 immune
XX PT responses.
XX PS Claim 3; Page 95; 110pp; English.
XX CC The present sequence is that of antisense oligonucleotide ISIS #114653.
XX CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX CC deoxy gap, is targeted to the 3' untranslated region of human Toll-like
XX CC receptor 4 mRNA. It exhibits 72% inhibition of human Toll-like receptor 4
XX CC expression in THP-1 cells. It is useful for inhibiting the expression of
XX CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
XX CC particularly useful for treating or preventing a disease or condition
XX CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
XX CC condition involving an immune response, particularly Th1 or Th2 responses
XX SQ Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;

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Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3521 TTGTTTAAAGGGGCACTCT 3540
Db 20 TTGTTTAAAGGGGCACTCT 1

RESULT 82
ACC83602/c
ID ACC83602 standard; DNA; 20 BP.
XX ACC83602;
XX
XX 08-SEP-2003 (first entry)
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114625.
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 6
FT /tag= b
FT /mod_base= m5c
FT modified_base 7
FT /tag= c
FT /mod_base= m5c
FT modified_base 8
FT /tag= d
FT /mod_base= m5c
FT modified_base 11
FT /tag= e
FT /mod_base= m5c
FT modified_base 12
FT /tag= f
FT /mod_base= m5c
FT modified_base 16
FT /tag= g
FT /mod_base= m5c
FT modified_base 18
FT /tag= h
FT /mod_base= m5c
XX WO2003044163-A2.
XX PN
XX 30-MAY-2003.
XX PD
XX 14-NOV-2002; 2002WO-US036390.
XX PF
XX 19-NOV-2001; 2001US-00001863.
XX PR
XX (ISIS-) ISIS PHARM INC.
XX PA
XX Karras JG, Koller E;
XX PI WPI; 2003-468766/44.
XX DR
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX Example 14; Page 95; 110pp; English.
XX PS

XX The present sequence is that of antisense oligonucleotide ISIS #114625.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the 5' untranslated region of human Toll-like
XX receptor 4 mRNA. It exhibits 47% inhibition of human Toll-like receptor 4
XX expression in THP-1 cells. It is useful for inhibiting the expression of
XX Toll-like receptor 4 in cells or tissues. The oligonucleotide is
XX particularly useful for treating or preventing a disease or condition
XX associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
XX condition involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 73;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 57 TCGCGCCCTGGCTGGGACTCT 76
Db 20 TCGCGCCCTGGCTGGGACTCT 1

RESULT 83
ACC83604/c
ID ACC83604 standard; DNA; 20 BP.
XX ACC83604;
XX
XX 08-SEP-2003 (first entry)
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114627.
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 5
FT /tag= b
FT /mod_base= m5c
FT modified_base 6
FT /tag= c
FT /mod_base= m5c
FT modified_base 11
FT /tag= d
FT /mod_base= m5c
FT modified_base 13
FT /tag= e
FT /mod_base= m5c
FT modified_base 14
FT /tag= f
FT /mod_base= m5c
FT modified_base 16
FT /tag= g
FT /mod_base= m5c
FT modified_base 18
FT /tag= h
FT /mod_base= m5c
XX WO2003044163-A2.
XX PN
XX 30-MAY-2003.
XX PD
XX 14-NOV-2002; 2002WO-US036390.
XX PF
XX

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PR 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Karras JG, Koller E;
PI
XX WPI; 2003-468766/44.
DR
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT expression, particularly useful for preventing, delaying or treating e.g.
PT inflammatory disorders, or conditions involving Th1 or Th2 immune
PT responses.
XX
XX Example 14; Page 95; 110pp; English.
PS
XX The present sequence is that of antisense oligonucleotide ISIS #114627.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the 5' untranslated region of human Toll-like
CC receptor 4 mRNA. It exhibits 30% inhibition of human Toll-like receptor 4
CC expression in THP-1 cells. It is useful for inhibiting the expression of
CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC particularly useful for treating or preventing a disease or condition
CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC condition involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 128 CTGCGTGGAGACTTGGCCCT 147
DB 20 CTGCGTGGAGACTTGGCCCT 1

RESULT 84
ACC83581/c
ID ACC83581 standard; DNA; 20 BP.
XX
XX ACC83581;
AC
XX 08-SEP-2003 (first entry)
DT
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114631.
DE
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
XX Homo sapiens.
OS
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT
FT modified_base 4
FT /*tag= b
FT /mod_base= m5c
FT modified_base 10
FT /*tag= c
FT /mod_base= m5c
FT modified_base 12
FT /*tag= d
FT /mod_base= m5c
FT modified_base 20
FT /*tag= e
FT /mod_base= m5c
XX
XX WO2003044163-A2.

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XX 30-MAY-2003.
PD
XX 14-NOV-2002; 2002WO-US036390.
PF
XX 19-NOV-2001; 2001US-00001863.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Karras JG, Koller E;
PI
XX WPI; 2003-468766/44.
DR
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
PT expression, particularly useful for preventing, delaying or treating e.g.
PT inflammatory disorders, or conditions involving Th1 or Th2 immune
PT responses.
XX
XX Claim 3; Page 95; 110pp; English.
PS
XX The present sequence is that of antisense oligonucleotide ISIS #114631.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC mRNA. It exhibits 73% inhibition of human Toll-like receptor 4 expression
CC in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC receptor 4 in cells or tissues. The oligonucleotide is particularly
CC useful for treating or preventing a disease or condition associated with
CC Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 453 GCATATCAGAGCCTAAGCCA 472
DB 20 GCATATCAGAGCCTAAGCCA 1

RESULT 85
ACC83589/c
ID ACC83589 standard; DNA; 20 BP.
XX
XX ACC83589;
AC
XX 08-SEP-2003 (first entry)
DT
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114644.
DE
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
XX Homo sapiens.
OS
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT
FT modified_base 3
FT /*tag= b
FT /mod_base= m5c
FT modified_base 15
FT /*tag= c
FT /mod_base= m5c
FT modified_base 17
FT /*tag= d
FT /mod_base= m5c
FT
FT

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FT modified_base 18 /tag= e
FT /mod_base= m5c
FT modified_base 19 /tag= f
FT /mod_base= m5c
FT modified_base 20 /tag= g
FT /mod_base= m5c
XX
XX WO2003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114644.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the coding region of human Toll-like receptor 4
XX mRNA. It exhibits 72% inhibition of human Toll-like receptor 4 expression
XX in THP-1 cells. It is useful for inhibiting the expression of Toll-like
XX receptor 4 in cells or tissues. The oligonucleotide is particularly
XX useful for treating or preventing a disease or condition associated with
XX Toll-like receptor 4, e.g. an inflammatory disorder or a condition
XX involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2259 GGGGTGCTCCATTTCAGCT 2278
Db 20 GGGGTGCTCCATTTCAGCT 1

RESULT 86
ACC83582/c
ID ACC83582 standard; DNA; 20 BP.
XX
XX ACC83582;
XX
XX 08-SEP-2003 (first entry)
XX
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114632.
XX
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
XX phosphorothioate; antisense; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = phosphorothioate nucleotides, the
XX oligonucleotide comprises a central gap region of 10 2'-

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FT modified_base 5 /tag= b
FT /mod_base= m5c
FT modified_base 10 /tag= c
FT /mod_base= m5c
FT modified_base 12 /tag= d
FT /mod_base= m5c
XX
XX PN WO2003044163-A2.
XX
XX PD 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114632.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the coding region of human Toll-like receptor 4
XX mRNA. It exhibits 72% inhibition of human Toll-like receptor 4 expression
XX in THP-1 cells. It is useful for inhibiting the expression of Toll-like
XX receptor 4 in cells or tissues. The oligonucleotide is particularly
XX useful for treating or preventing a disease or condition associated with
XX Toll-like receptor 4, e.g. an inflammatory disorder or a condition
XX involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 501 CCCATCCAGAGTTTGGCCCT 520
Db 20 CCCATCCAGAGTTTGGCCCT 1

RESULT 87
ACC83593/c
ID ACC83593 standard; DNA; 20 BP.
XX
XX ACC83593;
XX
XX 08-SEP-2003 (first entry)
XX
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114649.
XX
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
XX phosphorothioate; antisense; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER

```

FT	/note= "OTHER = phosphorothioate nucleotides, the	DE	Human Toll-like receptor 4 antisense oligonucleotide ISIS #114630.
FT	oligonucleotide comprises a central gap region of 10 2'-	XX	
FT	deoxynucleotides, flanked on both sites by 5-nucleotides	KW	Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
FT	wings composed of 2'-methoxyethyl nucleotides"	KX	phosphorothioate; antisense; ss.
FT	2	OS	Homo sapiens.
FT	/tag= b	XX	
FT	/mod_base= m5c	FT	Location/Qualifiers
FT	3	FT	1. .20
FT	/tag= c	FT	/tag= a
FT	/mod_base= m5c	FT	/mod_base= OTHER
FT	14	FT	/note= "OTHER = phosphorothioate nucleotides, the
FT	/tag= d	FT	oligonucleotide comprises a central gap region of 10 2'-
FT	/mod_base= m5c	FT	deoxynucleotides, flanked on both sites by 5-nucleotides
FT	17	FT	wings composed of 2'-methoxyethyl nucleotides"
FT	/tag= e	FT	9
FT	/mod_base= m5c	FT	modified_base
FT	18	FT	/tag= b
FT	/tag= f	FT	/mod_base= m5c
FT	/mod_base= m5c	FT	12
FT	19	FT	/tag= c
FT	/tag= g	FT	/mod_base= m5c
FT	/mod_base= m5c	FT	14
XX		FT	/tag= d
XX	WO2003044163-A2.	FT	/mod_base= m5c
XX	30-MAY-2003.	FT	15
XX	14-NOV-2002; 2002WO-US036390.	FT	/tag= e
XX	19-NOV-2001; 2001US-00001863.	FT	/mod_base= m5c
XX	(ISIS-) ISIS PHARM INC.	FT	19
XX	Karras JG, Koller E;	FT	/tag= f
XX	WPI; 2003-468766/44.	FT	/mod_base= m5c
XX		XX	WO2003044163-A2.
XX	New antisense oligonucleotides for modulating Toll-like receptor 4 gene	PN	
XX	expression, particularly useful for preventing, delaying or treating e.g.	PD	30-MAY-2003.
XX	inflammatory disorders, or conditions involving Th1 or Th2 immune	XX	
XX	responses.	XX	14-NOV-2002; 2002WO-US036390.
XX	Claim 3; Page 95; 110pp; English.	XX	19-NOV-2001; 2001US-00001863.
XX	The present sequence is that of antisense oligonucleotide ISIS #114649.	XX	(ISIS-) ISIS PHARM INC.
CC	This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a	PI	Karras JG, Koller E;
CC	deoxy gap, is targeted to the 3' untranslated region of human Toll-like	XX	WPI; 2003-468766/44.
CC	receptor 4 mRNA. It exhibits 91% inhibition of human Toll-like receptor 4	XX	
CC	expression in THP-1 cells. It is useful for inhibiting the expression of	XX	New antisense oligonucleotides for modulating Toll-like receptor 4 gene
CC	Toll-like receptor 4 in cells or tissues. The oligonucleotide is	XX	expression, particularly useful for preventing, delaying or treating e.g.
CC	particularly useful for treating or preventing a disease or condition	XX	inflammatory disorders, or conditions involving Th1 or Th2 immune
CC	associated with Toll-like receptor 4, e.g. an inflammatory disorder or a	XX	responses.
CC	condition involving an immune response, particularly Th1 or Th2 responses	XX	Claim 3; Page 95; 110pp; English.
XX	Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;	XX	The present sequence is that of antisense oligonucleotide ISIS #114630.
SQ		CC	This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
		CC	deoxy gap, is targeted to the 3' untranslated region of human Toll-like
		CC	receptor 4 mRNA. It exhibits 48% inhibition of human Toll-like receptor 4
		CC	expression in THP-1 cells. It is useful for inhibiting the expression of
		CC	Toll-like receptor 4 in cells or tissues. The oligonucleotide is
		CC	particularly useful for treating or preventing a disease or condition
		CC	associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
		CC	condition involving an immune response, particularly Th1 or Th2 responses
		XX	Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
		SQ	
			Query Match 0.5%; Score 20; DB 1; Length 20;
			Best Local Similarity 100.0%; Pred. No. 73;
			Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	2821 AGGGCTGCTAATCTCAAGGA 2840	QY	282 TGCATGGAGCTGAATTCTTA 301
Db	20 AGGGCTGCTAATCTCAAGGA 1	Db	20 TGCATGGAGCTGAATTCTTA 1
			Query Match 0.5%; Score 20; DB 1; Length 20;
			Best Local Similarity 100.0%; Pred. No. 73;
			Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
RESULT 88			
ACC83607/C			
ID ACC83607 standard; DNA; 20 BP.			
XX ACC83607;			
XX AC			
XX			
DT 08-SEP-2003 (first entry)			
XX			

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RESULT 89
ACC83610/c
ID ACC83610 standard; DNA; 20 BP.
XX
XX
AC ACC83610;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114636.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 4
FT /tag= b
FT /mod_base= m5c
FT modified_base 5
FT /tag= c
FT /mod_base= m5c
FT modified_base 8
FT /tag= d
FT /mod_base= m5c
FT modified_base 13
FT /tag= e
FT /mod_base= m5c
FT modified_base 14
FT /tag= f
FT /mod_base= m5c
XX
XX WO2003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Example 14; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114636.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the coding region of human Toll-like receptor 4
XX mRNA. It exhibits 59% inhibition of human Toll-like receptor 4 expression
XX in THP-1 cells. Such oligonucleotides are useful for inhibiting the
XX expression of Toll-like receptor 4 in cells or tissues. The
XX oligonucleotide is particularly useful for treating or preventing a
XX disease or condition associated with Toll-like receptor 4, e.g. an
XX inflammatory disorder or a condition involving an immune response,
XX particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 8 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
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```
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred.No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 903 ATTCAAGGCTCTGGCTGGTTT 922
DB 20 ATTCAAGGCTCTGGCTGGTTT 1
|||||
|||||

RESULT 90
ACC83613/c
ID ACC83613 standard; DNA; 20 BP.
XX
XX ACC83613;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114645.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 2
FT /tag= b
FT /mod_base= m5c
FT modified_base 5
FT /tag= c
FT /mod_base= m5c
FT modified_base 11
FT /tag= d
FT /mod_base= m5c
FT modified_base 12
FT /tag= e
FT /mod_base= m5c
FT modified_base 14
FT /tag= f
FT /mod_base= m5c
FT modified_base 16
FT /tag= e
FT /mod_base= m5c
FT modified_base 17
FT /tag= f
FT /mod_base= m5c
XX
XX WO2003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
```

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PS Example 14; Page 95; 110pp; English.
XX
CC The present sequence is that of antisense oligonucleotide ISIS #114645.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC mRNA. It exhibits 38% inhibition of human Toll-like receptor 4 expression
CC in THP-1 cells. More active oligonucleotides are useful for inhibiting
CC the expression of Toll-like receptor 4 in cells or tissues. The
CC oligonucleotide is particularly useful for treating or preventing a
CC disease or condition associated with Toll-like receptor 4, e.g. an
CC inflammatory disorder or a condition involving an immune response,
CC particularly Th1 or Th2 responses
XX
SQ Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2304 CCGGCTGGCCATTGCTGC 2323
DB 20 CCGGCTGGCCATTGCTGC 1

RESULT 91
ACC83585/c
ID ACC83585 standard; DNA; 20 BP.
XX AC ACC83585;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114640.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= m5c
FT
FT modified_base 7
FT /*tag= c
FT /mod_base= m5c
FT
FT modified_base 9
FT /*tag= d
FT /mod_base= m5c
FT
FT modified_base 12
FT /*tag= e
FT /mod_base= m5c
FT
FT modified_base 14
FT /*tag= f
FT /mod_base= m5c
FT
FT modified_base 16
FT /*tag= g
FT /mod_base= m5c
FT
FT
FT WO2003044163-A2.
XX
PN 30-MAY-2003.
XX
PD
XX
PF 14-NOV-2002; 2002WO-US036390.
XX
PR 19-NOV-2001; 2001US-00001863.

(ISIS-) ISIS PHARM INC.
XX
PA
XX Karras JG, Koller E;
XX
XX WPI; 2003-468766/44.
XX
New antisense oligonucleotides for modulating Toll-like receptor 4 gene
expression, particularly useful for preventing, delaying or treating e.g.
inflammatory disorders, or conditions involving Th1 or Th2 immune
responses.
XX
PS Claim 3; Page 95; 110pp; English.
XX
CC The present sequence is that of antisense oligonucleotide ISIS #114640.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC mRNA. It exhibits 87% inhibition of human Toll-like receptor 4 expression
CC in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC receptor 4 in cells or tissues. The oligonucleotide is particularly
CC useful for treating or preventing a disease or condition associated with
CC Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC involving an immune response, particularly Th1 or Th2 responses
XX
SQ Sequence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2016 ATGCTGTGCTGAGTTTCAA 2035
DB 20 ATGCTGTGCTGAGTTTCAA 1

RESULT 92
ACC83598/c
ID ACC83598 standard; DNA; 20 BP.
XX AC ACC83598;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114654.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT
FT modified_base 1
FT /*tag= b
FT /mod_base= m5c
FT
FT modified_base 2
FT /*tag= c
FT /mod_base= m5c
FT
FT modified_base 3
FT /*tag= d
FT /mod_base= m5c
FT
FT modified_base 17
FT /*tag= e
FT /mod_base= m5c
FT
FT modified_base 18
FT /*tag= f
FT /mod_base= m5c
FT
```

```

FT modified_base 19 /*tag= g
FT /*tag= g
FT /mod_base= m5c
FT modified_base 20 /*tag= h
FT /*tag= h
FT /mod_base= m5c
FT XX
FT XX
PN WO2003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
FT expression, particularly useful for preventing, delaying or treating e.g.
FT inflammatory disorders, or conditions involving Th1 or Th2 immune
FT responses.
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114654.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the 3' untranslated region of human Toll-like
CC receptor 4 mRNA. It exhibits 9% inhibition of human Toll-like receptor 4
CC expression in THP-1 cells. It is useful for inhibiting the expression of
CC Toll-like receptor 4 in cells or tissues. The oligonucleotide is
CC particularly useful for treating or preventing a disease or condition
CC associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
CC condition involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 73;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 3531 GGGGCACTCTTTTAAACGGG 3550
XX |||||
XX 20 GGGGCACTCTTTTAAACGGG 1
XX
XX
XX RESULT 93
XX ACC83586/c
XX ID ACC83586 standard; DNA; 20 BP.
XX
XX AC ACC83586;
XX
XX DT 08-SEP-2003 (first entry)
XX
XX DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114641.
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
XX phosphorothioate; antisense; ss.
XX
XX OS Homo sapiens.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= a
XX /mod_base= OTHER
XX /note= OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 4

```

```

FT /*tag= b
FT /mod_base= m5c
FT modified_base 5 /*tag= c
FT /*tag= c
FT /mod_base= m5c
FT modified_base 8 /*tag= d
FT /*tag= d
FT /mod_base= m5c
FT modified_base 10 /*tag= e
FT /*tag= e
FT /mod_base= m5c
FT modified_base 12 /*tag= f
FT /*tag= f
FT /mod_base= m5c
FT modified_base 13 /*tag= g
FT /*tag= g
FT /mod_base= m5c
FT XX
PN WO2003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
FT expression, particularly useful for preventing, delaying or treating e.g.
FT inflammatory disorders, or conditions involving Th1 or Th2 immune
FT responses.
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114641.
CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC mRNA. It exhibits 8% inhibition of human Toll-like receptor 4 expression
CC in THP-1 cells. It is useful for inhibiting the expression of Toll-like
CC receptor 4 in cells or tissues. The oligonucleotide is particularly
CC useful for treating or preventing a disease or condition associated with
CC Toll-like receptor 4, e.g. an inflammatory disorder or a condition
CC involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 73;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2060 CATCATTCGTCGTCTCGGTCC 2079
XX |||||
XX 20 CATCATTCGTCGTCTCGGTCC 1
XX
XX
XX RESULT 94
XX ACC83587/c
XX ID ACC83587 standard; DNA; 20 BP.
XX
XX AC ACC83587;
XX
XX DT 08-SEP-2003 (first entry)
XX
XX DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114642.
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
XX phosphorothioate; antisense; ss.
XX
XX

```

```

OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 2
FT /tag= b
FT /mod_base= m5c
FT modified_base 6
FT /tag= c
FT /mod_base= m5c
FT modified_base 8
FT /tag= d
FT /mod_base= m5c
FT modified_base 10
FT /tag= e
FT /mod_base= m5c
FT modified_base 17
FT /tag= f
FT /mod_base= m5c
FT modified_base 18
FT /tag= g
FT /mod_base= m5c
FT
XX W02003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114642.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the coding region of human Toll-like receptor 4
XX mRNA. It exhibits 76% inhibition of human Toll-like receptor 4 expression
XX in THP-1 cells. It is useful for inhibiting the expression of Toll-like
XX receptor 4 in cells or tissues. The oligonucleotide is particularly
XX useful for treating or preventing a disease or condition associated with
XX Toll-like receptor 4, e.g. an inflammatory disorder or a condition
XX involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 8 A; 6 C; 5 G; 1 T; 0 U; 0 Other;
XX
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2073 TCGGTCCTCAGTGTGCTTGT 2092
Db |||||||
20 TCGGTCCTCAGTGTGCTTGT 1

RESULT 95
ACC83591/c

ID ACC83591 standard; DNA; 20 BP.
XX
AC ACC83591;
XX
XX 08-SEP-2003 (first entry)
XX
XX Human Toll-like receptor 4 antisense oligonucleotide ISIS #114647.
DE
XX Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
XX phosphorothioate; antisense; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 2
FT /tag= b
FT /mod_base= m5c
FT modified_base 5
FT /tag= c
FT /mod_base= m5c
FT modified_base 7
FT /tag= d
FT /mod_base= m5c
FT modified_base 19
FT /tag= e
FT /mod_base= m5c
FT
XX W02003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114647.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the coding region of human Toll-like receptor 4
XX mRNA. It exhibits 71% inhibition of human Toll-like receptor 4 expression
XX in THP-1 cells. It is useful for inhibiting the expression of Toll-like
XX receptor 4 in cells or tissues. The oligonucleotide is particularly
XX useful for treating or preventing a disease or condition associated with
XX Toll-like receptor 4, e.g. an inflammatory disorder or a condition
XX involving an immune response, particularly Th1 or Th2 responses
XX
XX Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.5%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2380 AGCACTTCATCCAGACGCGC 2399
|||||

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Db 20 AGCACTTCATCCAGAGCCGC 1

RESULT 96
ACC83595/c
ID ACC83595 standard; DNA; 20 BP.
AC
XX ACC83595;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114651.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX

Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 1
FT /tag= b
FT /mod_base= m5c
FT modified_base 18
FT /tag= c
FT /mod_base= m5c
FT modified_base 19
FT /tag= d
FT /mod_base= m5c
FT modified_base 20
FT /tag= e
FT /mod_base= m5c
XX WO2003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Claim 3; Page 95; 110pp; English.
XX
XX The present sequence is that of antisense oligonucleotide ISIS #114651.
XX This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
XX deoxy gap, is targeted to the 3' untranslated region of human Toll-like
XX receptor 4 mRNA. It exhibits 91% inhibition of human Toll-like receptor 4
XX expression in THP-1 cells. It is useful for inhibiting the expression of
XX Toll-like receptor 4 in cells or tissues. The oligonucleotide is
XX particularly useful for treating or preventing a disease or condition
XX associated with Toll-like receptor 4, e.g. an inflammatory disorder or a
XX condition involving an immune response, particularly Th1 or Th2 responses
XX
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.5%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 73;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2894 GGGCATTTTCACCACTCAG 2913
DB 20 GGGCATTTTCACCACTCAG 1

RESULT 97
ACC83612/c
ID ACC83612 standard; DNA; 20 BP.
XX
AC ACC83612;
XX
DT 08-SEP-2003 (first entry)
XX
DE Human Toll-like receptor 4 antisense oligonucleotide ISIS #114639.
XX
KW Human; Toll-like receptor 4; receptor; antiinflammatory; immunomodulator;
KW phosphorothioate; antisense; ss.
XX
OS Homo sapiens.
XX

Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER = phosphorothioate nucleotides, the
FT oligonucleotide comprises a central gap region of 10 2'-
FT deoxynucleotides, flanked on both sites by 5-nucleotides
FT wings composed of 2'-methoxyethyl nucleotides"
FT modified_base 2
FT /tag= b
FT /mod_base= m5c
FT modified_base 5
FT /tag= c
FT /mod_base= m5c
FT modified_base 6
FT /tag= d
FT /mod_base= m5c
FT modified_base 8
FT /tag= e
FT /mod_base= m5c
FT modified_base 13
FT /tag= f
FT /mod_base= m5c
FT modified_base 14
FT /tag= g
FT /mod_base= m5c
FT modified_base 20
FT /tag= h
FT /mod_base= m5c
XX WO2003044163-A2.
XX
XX 30-MAY-2003.
XX
XX 14-NOV-2002; 2002WO-US036390.
XX
XX 19-NOV-2001; 2001US-00001863.
XX (ISIS-) ISIS PHARM INC.
XX
XX Karras JG, Koller E;
XX WPI; 2003-468766/44.
XX
XX New antisense oligonucleotides for modulating Toll-like receptor 4 gene
XX expression, particularly useful for preventing, delaying or treating e.g.
XX inflammatory disorders, or conditions involving Th1 or Th2 immune
XX responses.
XX
XX Example 14; Page 95; 110pp; English.

```
XX CC The present sequence is that of antisense oligonucleotide ISIS #114639.
CC CC This chimeric phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC CC deoxy gap, is targeted to the coding region of human Toll-like receptor 4
CC CC mRNA. It exhibits 0% inhibition of human Toll-like receptor 4 expression
CC CC in THP-1 cells. Active oligonucleotides are useful for inhibiting the
CC CC expression of Toll-like receptor 4 in cells or tissues. The
CC CC oligonucleotide is particularly useful for treating or preventing a
CC CC disease or condition associated with Toll-like receptor 4, e.g. an
CC CC inflammatory disorder or a condition involving an immune response,
CC CC particularly Th1 or Th2 responses
XX SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 73;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1943 GATCAGGACCGAGGCAGC 1962
XX DB |||||||||||||||||||
XX 20 GATCAGGACCGAGGCAGC 1
XX
XX RESULT 98
XX AA169670/C
XX ID AA169670 standard; DNA; 24 BP.
XX AC AA169670;
XX
XX DT 10-JAN-2002 (first entry)
XX
XX DE Hepatitis E virus HEV-T1 sequence related PCR primer #35.
XX
XX KW Hepatitis E virus; HEV-T1; hepatitis infection; PCR primer; ss.
XX
XX OS Unidentified.
XX
XX PN CN1300771-A.
XX
XX PD 27-JUN-2001.
XX
XX PF 23-DEC-1999; 99CN-00125741.
XX
XX PR 23-DEC-1999; 99CN-00125741.
XX
XX PA (CHME-) CHINESE MEDICINE & BIOLOGIC PROD APPRAIS.
XX
XX PI Wang Y, Zhang H, Li H;
XX
XX DR WPI; 2001-550442/62.
XX
XX PT Hepatitis E virus gene sequence and its application.
XX
XX PS Example 1; Page 15(Disclosure); 34pp; Chinese.
XX
XX CC The present invention relates to a novel nucleotide sequence and protein
XX CC of a new hepatitis E virus HEV-T1 and the application of the nucleotide
XX CC sequence and protein in diagnosing, preventing and treating hepatitis.
XX CC The present sequence is a PCR primer described in the exemplification of
XX CC the invention
XX SQ Sequence 24 BP; 6 A; 4 C; 11 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 19.2; DB 1; Length 24;
XX Best Local Similarity 87.5%; Pred. No. 1.2e+02;
XX Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 3250 CCATCTCGGTCAVTCCTCGAACATG 3273
XX DB |||||||||||||||||||
XX 24 CCATCTCGGTCAVTCCTCGAACATG 1
XX
XX RESULT 99
```

```
AAC84782
ID AAC84782 standard; DNA; 19 BP.
XX
XX AC AAC84782;
XX
XX DT 20-APR-2001 (first entry)
XX
XX DE Human TLR4 gene exon 4 amplifying forward primer.
XX
XX KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
XX KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
XX KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
XX KW systematic inflammatory response syndrome; pyelonephritis; bronchitis;
XX KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
XX KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200077204-A1.
XX
XX PD 21-DEC-2000.
XX
XX PF 08-JUN-2000; 2000WO-US015723.
XX
XX PR 10-JUN-1999; 99US-00329515.
XX
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (LORENZ) LORENZ E.
XX
XX PI Lorenz E, Schwartz DA, Schutte BC;
XX
XX DR WPI; 2001-061872/07.
XX
XX PT Identifying humans at risk of, or having indication associated with
XX PT altered innate immunity involves detecting or determining whether DNA
XX PT amplified from a biological sample encodes a portion of variant toll
XX PT receptor 4.
XX
XX PS Example 1; Page 31; 97pp; English.
XX
XX CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
XX CC methods to identify polymorphisms at the human TLR4 locus and to identify
XX CC individuals at risk of, or having, an indication associated with altered
XX CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
XX CC reagent for detecting a polymorphism in human TLR4 gene. Since the
XX CC presence of TLR4 mutation is associated with gram-negative sepsis,
XX CC severity of sepsis, pre-term delivery and respiratory distress syndrome
XX CC in pre-term infants, agents which alter TLR4 activity are useful for
XX CC preventing or ameliorating infection by gram-negative bacteria, sepsis
XX CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
XX CC chronic airway disease, asthma, arthritis, local and systemic
XX CC inflammatory disease conditions such as systematic inflammatory response
XX CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
XX CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
XX CC obstructive pulmonary disease, local gram-negative bacterial infection
XX CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
XX CC amplifying the exons of human TLR4 gene
XX
XX SQ Sequence 19 BP; 5 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 86;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 812 CTTTATCCCAACCCAGGTGCA 830
XX DB |||||||||||||||||||
XX 1 CTTTATCCCAACCCAGGTGCA 19
XX
XX RESULT 100
XX ADB39125/c
XX ID ADB39125 standard; DNA; 19 BP.
XX
```

```

AC ADB39125;
XX
XX 04-DEC-2003 (first entry)
XX
XX Human toll-like receptor (TLR) -4 RT-PCR primer Seq ID4.
XX
XX vascular disease; Toll-like receptor-4 inhibitor; TLR-4 inhibitor;
XX atherosclerosis; restenosis; inflammation; vasotropic;
XX antiatherosclerotic; thrombolytic; cardiant; antiinflammatory;
XX antisense therapy; gene therapy; transplant atherosclerosis;
XX vein-graft atherosclerosis; thrombosis; stent restenosis;
XX angioplasty restenosis; heart disease; PCR; primer;
XX reverse transcription polymerase chain reaction; RT-PCR; human; ss;
XX TLR-4; Toll-like receptor 4.
XX
XX Homo sapiens.
XX
XX US2003077279-A1.
XX
XX 24-APR-2003.
XX
XX 23-APR-2002; 2002US-00128166.
XX
XX 24-OCT-2001; 2001US-0335637P.
XX
XX 17-DEC-2001; 2001US-0341359P.
XX
XX (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
XX Arditi M, Rajavashisth T, Shah PK;
XX WPI; 2003-615988/58.
XX
XX Treating a vascular disease, particularly atherosclerosis, thrombosis,
XX restenosis, stent restenosis, or angioplasty restenosis, by administering
XX a toll-like receptor-4 (TLR-4) inhibitor to a mammal.
XX
XX Example 6; Page 10; 21pp; English.
XX
XX This invention relates to a novel method for the treatment of a vascular
XX disease through the administration of a Toll-like receptor-4 (TLR-4)
XX inhibitor to a mammal. The TLR-4 protein has been linked to several
XX disease such as atherosclerosis, restenosis, inflammation and other
XX vascular diseases. Compounds which inhibit the activity of TLR-4, through
XX the inhibition of its receptor, may have vasotropic,
XX antiatherosclerotic, thrombolytic, cardiant and antiinflammatory
XX activities. This may also be achieved through antisense therapy or gene
XX therapy. The method or the system of the invention may therefore be
XX useful for inhibiting or treating a vascular disease, for example
XX atherosclerosis, transplant atherosclerosis, vein-graft atherosclerosis,
XX thrombosis, restenosis, stent restenosis, angioplasty restenosis, or
XX inflammation and other heart disease. The present sequence is that of a
XX PCR primer which was used for reverse transcription polymerase chain
XX reaction amplification of human TLR-4 in the exemplification of the
XX invention.
XX
XX Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 86;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2256 GAAGGGGTGCTCCATTTC 2274
XX
XX Db 19 GAAGGGGTGCTCCATTTC 1
XX
XX RESULT 101
XX ADI53115/c
XX ID ADI53115 standard; DNA; 19 BP.
XX
XX AC ADI53115;
XX
XX 22-APR-2004 (first entry)
XX

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```

XX Human Toll-like receptor 4 TLR-4 RT-PCR primer #2.
XX
XX ss; RT-PCR; reverse transcriptase; primer;
XX myeloid differentiation factor 88; MyD88; atherosclerosis; thrombosis;
XX restenosis; angina pectoris; ischaemia; stroke; heart attack;
XX osteonecrosis; colitis; poor kidney function; congestive heart failure;
XX poor blood circulation; slow wound healing; inflammation; infection;
XX claudication; Toll-like receptor 4; TLR-4; human.
XX
XX Homo sapiens.
XX
XX US2003148986-A1.
XX
XX 07-AUG-2003.
XX
XX 12-DEC-2002; 2002US-00317992.
XX
XX 17-DEC-2001; 2001US-0341359P.
XX
XX 23-APR-2002; 2002US-00128166.
XX
XX (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
XX Arditi M, Rajavashisth T, Shah PK;
XX WPI; 2003-897598/82.
XX
XX A system for inhibiting the biological activity of myeloid
XX differentiation factor 88 (MyD88), useful for treating vascular diseases
XX (e.g. atherosclerosis), comprises an intravascular device and MyD88
XX inhibitor coated on the device.
XX
XX Example 6; SEQ ID NO 4; 18pp; English.
XX
XX The invention relates to a system for inhibiting the biological activity
XX of myeloid differentiation factor 88 (MyD88) which comprises an
XX intravascular device and a therapeutic composition coated upon the
XX intravascular device, the composition comprising a MyD88 inhibitor. The
XX system or method is useful for treating vascular diseases including
XX atherosclerosis, transplant atherosclerosis, vein-graft atherosclerosis,
XX thrombosis, restenosis, stent restenosis or angioplasty restenosis. It
XX can be used for treating patients suffering from angina pectoris,
XX ischaemia, conditions associated with ischaemias including stroke,
XX transient ischaemic attacks, heart attack, osteonecrosis, colitis, poor
XX kidney function or congestive heart failure, poor blood circulation to
XX the extremities and complications of poor blood circulation including
XX slow wound healing, inflammation, infections and claudication. The
XX present sequence represents a human Toll-like receptor 4 TLR-4 reverse
XX transcriptase (RT)-PCR primer.
XX
XX Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.5%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 86;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2256 GAAGGGGTGCTCCATTTC 2274
XX
XX Db 19 GAAGGGGTGCTCCATTTC 1
XX
XX RESULT 102
XX ACC74142/c
XX ID ACC74142 standard; DNA; 24 BP.
XX
XX AC ACC74142;
XX
XX 11-JUL-2003 (first entry)
XX
XX Reverse primer for detecting murine TLR4 expression.
XX
XX Mouse; immunomodulator; antibacterial; immunosuppressive; CSF-1;
XX colony stimulating factor-1; septic shock; TLR; toll-like receptor;

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KW interleukin-12; IL-12; HPRT; hypoxanthine phosphoribosyl transferase;
XX PCR; primer; ss.
XX Mus sp.
XX WO2003028752-A1.
XX 10-APR-2003.
XX 03-OCT-2002; 2002WO-AU001348.
XX PF
XX 03-OCT-2001; 2001AU-00008071.
XX PR
XX (UYQU ) UNIV QUEENSLAND.
XX PA
XX Hume DA, Sweet MJ, Stacey KJ, Sester DP;
XX WPI; 2003-381587/36.
XX DR
XX Modulating an immune response in an animal, useful for the prophylactic
XX or therapeutic treatment of bacterially-induced septic shock, by
XX modulating colony stimulating factor-1 (CSF-1) activity in an animal.
XX Example; Page 18-19; 58pp; English.
XX PS
XX The invention relates to modulating an immune response in an animal. The
XX method of the invention comprises modulating colony stimulating factor-1
XX (CSF-1) activity in order to modulate the immune response of the animal.
XX Also disclosed is a pharmaceutical composition comprising a modulator of
XX CSF-1 activity and a pharmaceutical carrier. The method or the
XX pharmaceutical composition is useful for the prophylactic or therapeutic
XX treatment of bacterially-induced septic shock. The sequences given in
XX records ACC74129-ACC74161 represent primers and probes used in an example
XX from the invention to detect murine genes
XX CC
XX Sequence 24 BP; 7 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
XX SQ
Query Match 0.5%; Score 18.8; DB 1; Length 24;
Best Local Similarity 90.9%; Pred. NO. 1.3e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 625 AACTTAATGTGGTCAACAATCT 646
DB 22 AACTCAATGTGGTCAACAATT 1
|||||
RESULT 103
ADF17210/C
ID ADF17210 standard; DNA; 20 BP.
XX AC
XX ADF17210;
XX DT
XX 12-FEB-2004 (first entry)
XX DE
XX Human toll-like receptor 4 (TLR4) gene PCR primer #4.
XX KW
XX therapeutic agent; endothelial disorder; 3-amino-1;
XX 2-benzisothiazole compound; endothelial disorders; toxemia;
XX severe toxemia; toxic shock; haemorrhagic shock;
XX alcohol induced cirrhosis; adult respiratory distress syndrome;
XX chronic rheumatoid arthritis; ulcerative gastritis; Crohn's disease;
XX glomerulonephritis; infectious carditis; systemic lupus erythematosus;
XX scleroderma; Sjogren's syndrome; multiple organ failure;
XX autoimmune disease; multiple sclerosis; PCR; primer; ss; human;
XX toll-like receptor 4; TLR4.
XX OS
XX Homo sapiens.
XX PN
XX WO2003087072-A1.
XX PD
XX 23-OCT-2003.
XX PF
XX 31-MAR-2003; 2003WO-JP004108.

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XX 29-MAR-2002; 2002JP-00132121.
XX PR
XX (MOCH ) MOCHIDA PHARM CO LTD.
XX FI
XX Furusako S, Satoh T, Nakamura M, Mizuno M, Mori S;
XX WPI; 2003-903121/82.
XX DR
XX Agents for treating diseases associated with endothelial disorders,
XX PT toxemia or toll like receptor signaling comprise new or known 3-amino-1,2
XX -benzisothiazole compounds.
XX PS
XX Example 4; SEQ ID NO 7; 180pp; Japanese.
XX CC
XX The invention comprises therapeutic agents for preventing or treating
XX diseases associated with endothelial disorders, the agents contain a 3-
XX amino-1,2-benzisothiazole compound. The therapeutic agents of the
XX invention are useful for preventing/treating: diseases associated with
XX endothelial disorders, toxemia, severe toxemia, adult respiratory distress
XX syndrome, haemorrhagic shock, alcohol induced cirrhosis, ulcerative gastritis, Crohn's
XX disease, chronic rheumatoid arthritis, infective carditis, systemic lupus
XX erythematosus, scleroderma, Sjogren's syndrome, multiple organ failure
XX or autoimmune diseases (e.g. multiple sclerosis). The present DNA
XX sequence represents a PCR primer that was used in the exemplification of
XX the invention.
XX SQ
Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.5%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. NO. 1.1e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2784 GCTAAGGGTGAGTAATTCCTCA 2803
DB 20 GCTAAGGGTGAGTAATTCCTCA 1
|||||
RESULT 104
ADP98293/C
ID ADP98293 standard; DNA; 24 BP.
XX AC
XX ADP98293;
XX DT
XX 23-SEP-2004 (first entry)
XX DE
XX C. albicans specific gene, orf6.2403, identification primer B.
XX KW
XX Diploid fungal cell; allele; gene disruption cassette;
XX promoter replacement fragment; antifungal; fungicide; gene therapy;
XX infection; Candida albicans; identification; primer; ss.
XX OS
XX Candida albicans.
XX OS
XX Unidentified.
XX PN
XX WO2004056965-A2.
XX PD
XX 08-JUL-2004.
XX PF
XX 19-DEC-2003; 2003WO-US040618.
XX PR
XX 19-DEC-2002; 2002US-0434832P.
XX XX
XX (ELIT-) ELITRA PHARM INC.
XX PA (ELIT-) ELITRA CANADA LTD.
XX PI
XX Roemer T, Jiang B, Boone C, Bussey H;
XX WPI; 2004-500296/47.
XX DR
XX Constructing a strain of diploid fungal cells in which both alleles of a
XX gene are modified comprises modifying the alleles of a gene in the fungal
XX PT

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cells by recombination using a gene disruption cassette and a promoter replacement fragment.

Claim 36; SEQ ID NO 5088; 163pp; English.

The invention relates to a novel method for constructing a strain of diploid fungal cells in which both alleles of a gene are modified. The method comprises modifying the alleles of a gene in diploid fungal cells by recombination using a gene disruption cassette and a promoter replacement fragment. The invention further comprises: assembling a collection of diploid fungal cells each of which comprises modified alleles of a different gene; a strain of diploid fungal cells comprising modified alleles of a gene, where the first allele of the gene is inactivated by a gene disruption cassette comprising a nucleotide sequence encoding an expressible selectable marker; and the expression of the second allele of the gene is regulated by a heterologous promoter that is operably linked to the coding region of the second allele of the gene, and where the gene encodes the polypeptide mentioned above; a collection of diploid fungal strains comprising the diploid strains cited above, where substantially all the different genes that encode the above amino acid sequences are modified and are present in different diploid strains in the collection; a nucleic acid molecule microarray comprising nucleic acid molecules, where each nucleic acid molecule comprises a nucleotide sequence that is hybridizable to a target nucleotide sequence comprising any of the 310 nucleotide sequences listed in the specification (ADP98516-ADP98825); identifying a gene that is essential to the survival or growth of a fungus, that contributes to the virulence and/or pathogenicity of a fungus, or that contributes to the resistance of a diploid fungus to an antifungal agent; identifying an antifungal agent that inhibits the growth of a diploid fungus, or a therapeutic agent for treatment of a mammalian disease; correlating changes in the levels of proteins or gene transcripts with the inhibition of growth or proliferation of a diploid fungal cell; a purified or isolated nucleic acid molecule comprising a nucleotide sequence encoding a gene product required for proliferation of *Candida albicans*, where the gene product consists of any of the above-mentioned amino acid sequences; a vector comprising a promoter operably linked to the nucleic acid molecule cited above; a host cell containing the vector; a purified or isolated polypeptide comprising any of the 61 amino acid sequences given in the specification (ADP96718-ADP96778); a fusion protein comprising a fragment of a first polypeptide fused to a second polypeptide, the fragment consisting of at least 6 consecutive residues of any of ADP98826-ADP99135; producing a polypeptide; identifying a compound which modulates the activity of a gene product encoded by a nucleic acid comprising any of ADP98516-ADP98825; eliciting an immune response in an animal; a strain of *Candida albicans*, where a first allele of a gene comprising any of ADP98516-ADP98825 is inactive and a second allele of the gene is under the control of a heterologous promoter; identifying a compound or binding partner that binds to the polypeptide comprising any of ADP98826-ADP99135, or its fragment; identifying a compound having the ability to inhibit growth or proliferation of *Candida albicans*; inhibiting growth or proliferation of *Candida albicans* cells; manufacturing an antimycotic compound; treating an infection of a subject by *Candida albicans*; preventing or containing contamination of an object by *Candida albicans*, or for preventing or inhibiting formation on a surface of a biofilm comprising *Candida albicans*; a pharmaceutical composition comprising a therapeutic amount of an agent which reduces the activity or level of a gene product encoded by a nucleic acid comprising any of ADP98516-ADP98825 in a pharmaceutical carrier; an antibody preparation which binds the polypeptide; methods for evaluating a compound against a target gene product encoded by any of ADP98516-ADP98825; identifying an antimycotic compound; a computer or a computer readable medium that comprises at least one of the nucleotide sequences mentioned in the specification or at least one amino acid sequence selected from ADP98826-ADP99135; a method assisted by a computer for identifying a putatively essential gene of a fungus; and a protein array comprising proteins, where at least one protein comprises an amino acid sequence or a portion of an amino acid sequence selected from ADP98516-ADP98825. The novel methods and compositions have fungicide activity. The compositions may be used in gene therapy. The composition and methods are useful for drug screening purposes or for diagnosing, preventing or treating infections associated with *Candida albicans*. These may also be used for constructing strains useful for identification and validation of gene products as effective

CC targets for therapeutic intervention, for identifying and validating gene
CC products as effective targets for therapeutic intervention, and for
CC collecting identified essential genes. This polynucleotide sequence
CC represents an identification primer used in the exemplification of the
CC invention. NOTE: This sequence was downloaded from an electronic sequence
CC listing provided on the WIPO website.

XX
SQ Sequence 24 BP; 2 A; 3 C; 7 G; 12 T; 0 U; 0 Other;

Query Match 0.5%; Score 18.2; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 1.5e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0

Qy 488 ATTGACAGGAAACCCATCCAGA 510
||| ||| ||| ||| ||| ||| |||
Db 23 ATCGACAGGAAACCCATCCAGA 1

RESULT 105
AAC84790
ID AAC84790 standard; DNA; 18 BP.
XX
AC AAC84790;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying forward primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systemic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
PI Lorenz E, Schwartz DA, Schutte BC;
XX
PR WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
PS
PS Example 1; Page 31; 97pp; English.
XX

CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC reagent for detecting a polymorphism in human TLR4 gene. Since the
CC presence of TLR4 mutation is associated with gram-negative sepsis,
CC severity of sepsis, pre-term delivery and respiratory distress syndrome
CC in pre-term infants, agents which alter TLR4 activity are useful for
CC preventing or ameliorating infection by gram-negative bacteria, sepsis
CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
CC chronic airway disease, asthma, arthritis, local and systemic
CC inflammatory disease conditions such as systematic inflammatory response
CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS),
CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic

CC obstructive pulmonary disease, local gram-negative bacterial infection
CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
CC amplifying the exons of human TLR4 gene

XX SQ Sequence 18 BP; 3 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 0.5%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1763 TTCATTGGATACGTTTCC 1780
Db 1 TTCATTGGATACGTTTCC 18

RESULT 106
AAV51439/c
ID AAV51439 standard; DNA; 22 BP.
XX AC AAV51439;
XX DT 02-FEB-1999 (first entry)
XX ZE Zea mays genome forward PCR primer #39.
XX DE Polymorphic marker; allele-specific; probe; amplification; PCR primer;
KW hybridisation; plant; hybrid certification; genetic contribution;
KW progeny; back-cross; hybrid; ancestry; corn; ss.
XX OS Synthetic.
OS Zea mays.
XX PN WO9824796-A1.
XX PD 11-JUN-1998.
XX PF 01-DEC-1997; 97WO-US021782.
XX PR 02-DEC-1996; 96US-0032069P.
XX PR 07-MAR-1997; 97US-00813507.
XX PA (AFFY-) AFFYMETRIX INC.
XX PI Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;
XX WPI; 1998-333252/29.
XX BR Brassica species allele-specific oligonucleotide probes and primers -
XX useful for plant breeding.
XX PS Example 1; Page 50; 65pp; English.
XX AAV51401-V51704 are forward PCR primers used to amplify fragments of the
CC Zea mays genome in order to detect polymorphic markers. Such markers can
CC be used in the construction of allele-specific primers and probes for
CC amplification or hybridisation, e.g. to determine common or disparate
CC ancestry between 2 or more plants, to monitor the genetic contribution of
CC an ancestral plant, to trace the progeny of proprietary plants, in
CC certification of a hybrid plant or to identify the progeny of a back-
CC crossed plant with an ancestral plant
XX SQ Sequence 22 BP; 10 A; 5 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.5%; Score 17.4; DB 1; Length 22;
Best Local Similarity 94.7%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3558 TTTCGCTTCCGTGCTTA 3576
Db 19 TTTCGCTTACGTGCTTA 1

RESULT 107

ABK88343/c
ID ABK88343 standard; DNA; 22 BP.
XX AC ABK88343;
XX DT 07-OCT-2002 (first entry)
XX DE Synthetic TLR4 PCR primer #6.
XX KW Endotoxin shock; bacterial infection; TLR4; PCR; primer; ss.
XX OS Synthetic.
XX PN JP2002176986-A.
XX PD 25-JUN-2002.
XX PF 14-DEC-2000; 2000JP-00380561.
XX PR 14-DEC-2000; 2000JP-00380561.
XX PA (NAGO-) ZH NAGOYA SANGYO KAGAKU KENKYUSHO.
XX DR WPI; 2002-569945/61.
XX PT An anti-bacterial protein useful for avoiding endotoxin shock caused by
PT bacterial infection.
XX PS Disclosure; Page 6; 16pp; Japanese.
XX CC The present invention relates to a new protein that can be used for
CC avoiding endotoxin shock caused by bacterial infection. The present
CC nucleic acid sequence represents one of a collection (ABK88338-ABK88345)
CC of synthetic TLR4 PCR primers that were used in the methods of the
XX invention
XX SQ Sequence 22 BP; 4 A; 9 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.5%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2225 GGTAAGGAATGAGCTAGTAAG 2246
Db 22 GGTGAGAAATGAGCTGTAAG 1

RESULT 108
ADG17647/c
ID ADG17647 standard; DNA; 22 BP.
XX AC ADG17647;
XX DT 26-FEB-2004 (first entry)
XX DE Mouse toll-like receptor (TLR) 4 RT-PCR primer SeqID9.
XX KW differentiation; osteoclast precursor cell; Toll-like receptor ligand;
KW TLR ligand; osteopathic; gene therapy; bone loss; bacterial infection;
KW PCR; primer; ss; RT-PCR; reverse transcription PCR; mouse; murine.
XX OS Mus sp.
XX PN WO2003094857-A2.
XX PD 20-NOV-2003.
XX PF 12-MAY-2003; 2003WO-US014946.
XX PR 10-MAY-2002; 2002US-0379941P.
XX PR 14-APR-2003; 2003US-0462859P.
XX PA (UYPE-) UNIV PENNSYLVANIA.

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XX PI Choi Y;
XX PT WPI; 2003-903937/82.
XX DR
XX PT Inhibiting differentiation of an osteoclast precursor cell, useful for
XX PT treating bone diseases, comprises contacting the cell with a Toll-like
XX PT receptor (TLR) ligand that stimulates a TLR on the osteoclast precursor
XX PT cell.
XX PS Example; SEQ ID NO 9; 72pp; English.
XX CC This invention relates to a novel method of inhibiting differentiation of
XX CC an osteoclast precursor cell comprises contacting the cell with at least
XX CC one Toll-like receptor (TLR) ligand, where the TLR ligand stimulates at
XX CC least one TLR on the osteoclast precursor cell, thus, inhibiting
XX CC differentiation of the osteoclast precursor cell. The invention may be
XX CC useful for the development of compounds with an osteopathic activity or
XX CC for gene therapy. The composition and methods are useful in inhibiting
XX CC differentiation of an osteoclast precursor cell which may be used in the
XX CC development of therapies to treat patients suffering from bone loss
XX CC associated with bacterial infection and bone loss resulting from other
XX CC diseases. These may also be used in identifying a Toll-like receptor that
XX CC inhibits differentiation of an osteoclast precursor cell. The present
XX CC sequence is that of a mouse toll-like receptor (TLR) RT-PCR primer which
XX CC was used in the exemplification of the invention.
XX SQ Sequence 22 BP; 4 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 17.2; DB 1; Length 22;
Best Local Similarity 86.4%; Pred. No. 1.7e+02;
Matches 19; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2225 GGTAGGGAATGAGTACTAAG 2246
Db 22 GGTGAGAAATGAGCTGGTAAG 1

RESULT 109
AAX21943/C
ID AAX21943 standard; DNA; 20 BP.
AC AAX21943;
XX 18-MAY-1999 (first entry)
XX Human B-raf kinase antisense oligonucleotide Isis#14142.
DE Antisense oligonucleotide; B-raf; human; inhibitor; T-cell activation;
XX hyperproliferative disorder; cancer; restenosis; psoriasis;
KW atherosclerosis; raf-associated tumour; diagnosis; therapy; ss.
XX Synthetic.
OS Homo sapiens.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate bases"
PN WO9902167-A1.
XX 21-JAN-1999.
PD 06-JUL-1998; 98WO-US013961.
XX 07-JUL-1997; 97US-00888982.
XX (ISIS-) ISIS PHARM INC.
PA Monia BP;
XX WPI; 1999-120502/10.
XX DR

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XX New antisense oligonucleotides - for modulation of human B-raf gene
XX expression.
XX PS Disclosure; Page 22; 72pp; English.
XX CC This sequence represents an example of an antisense oligonucleotide of
XX CC the invention. The oligonucleotides are 8-50 nucleotides in length, and
XX CC are targeted to a nucleic acid encoding human B-raf and which is capable
XX CC of inhibiting human B-raf expression. The oligonucleotides is used to
XX CC inhibit the (abnormal) expression of human B-raf, to inhibit
XX CC hyperproliferation of cells, to treat or prevent an abnormal
XX CC (e.g. of the brain or nervous system), restenosis, psoriasis or a
XX CC disorder characterised by T-cell activation and growth. They may also be
XX CC used to diagnose these diseases, as well as atherosclerosis. The
XX CC oligonucleotides of the invention may be used to distinguish raf-
XX CC associated tumours from tumours having other etiologies. The antisense
XX CC oligonucleotides can also be used to quantify raf expression in assays
XX SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1465 TGAACAAATGAGTGAG 1481
Db 20 TGAACAAATGAGTGAG 4

RESULT 110
AAD44802/C
ID AAD44802 standard; DNA; 20 BP.
XX AAD44802;
XX 13-DEC-2002 (first entry)
XX Human B-raf kinase antisense oligonucleotide ISIS #14142.
XX Human; raf; hyperproliferation; neovascularisation; ocular angiogenesis;
XX therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
XX antisense; phosphorothioate backbone; B-raf kinase; ss.
XX Homo sapiens.
XX Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
PN US6410518-B1.
XX 25-JUN-2002.
XX 18-FEB-2000; 2000US-00506073.
XX 31-MAY-1994; 94US-00250856.
XX 31-MAY-1995; 95WO-US007111.
XX 26-NOV-1996; 96US-00756806.
XX 07-JUL-1997; 97US-00888982.
XX 06-JUL-1998; 98WO-US013961.
XX 28-AUG-1998; 98US-00143214.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP;
XX WPI; 2002-597918/64.
XX DR

```

PT Treating cancer, angiogenesis or neovascularization by administering
PT antisense oligonucleotides targeted to human raf sequences.
PS
PS Example 18; Col 26; 41pp; English.
XX
CC The present invention relates to novel antisense oligonucleotides which
CC are targeted to nucleic acids encoding human raf proteins and capable of
CC inhibiting raf expression. The invention also relates to methods of
CC inhibiting hyperproliferation of cells which involves contacting the
CC hyperproliferating cells with a therapeutically effective amount of an
CC oligonucleotide of the invention. The method is useful for treating
CC cancer, angiogenesis or neovascularisation, especially ocular
CC angiogenesis or neovascularisation. The present DNA sequence is an
CC antisense oligonucleotide targetted to human B-raf kinase
XX
XX Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.4%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.5e+02; Indels 0; Gaps 0;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1465 TGAACAAATGAGTGAG 1481
Db 20 TGAACAAATGAGTGAG 4
RESULT 111
ADF09796/C
ID ADF09796 standard; DNA; 20 BP.
XX
AC ADF09796;
DT 12-FEB-2004 (first entry)
XX
XX Human b-raf kinase antisense oligonucleotide seq id 65.
XX
XX tumour metastasis; human; raf; raf expression inhibitor; cytostatic;
KW antiatherosclerotic; antisense-therapy; hyperproliferative disorder;
KW atherosclerosis; tumour; b-raf kinase; antisense oligonucleotide; ss.
XX
OS Homo sapiens.
XX
XX US2003119769-A1.
XX
XX 26-JUN-2003.
XX
XX 14-JUN-2002; 2002US-00173225.
XX
XX 31-MAY-1994; 94US-00250856.
XX 21-MAY-1995; 95WO-US007111.
XX 26-NOV-1996; 96US-00756806.
XX 07-JUL-1997; 97US-00888982.
XX 06-JUL-1998; 98WO-US013961.
XX 28-AUG-1998; 98US-00143214.
XX 18-FEB-2000; 2000US-00506073.
XX 25-JAN-2002; 2002US-00057550.
XX
XX (MONI/) MONIA B P.
PA
XX Monia BP;
XX
XX WPI; 2003-863446/80.
XX
XX Preventing and/or treating conditions associated with raf expression,
PT such as hyperproliferative disorders, atherosclerosis and tumors, using
PT antisense oligonucleotide modulation of human raf gene expression.
XX
XX Example 18; SEQ ID NO 92; 41pp; English.
PS
XX The invention describes a method of preventing or treating tumour
CC metastasis in an animal comprising administering to the animal an
CC oligonucleotide 8-50 nucleotides in length, which is targeted to mRNA
CC encoding human raf and capable of inhibiting raf expression. Also

CC disclosed are raf oligonucleotides, nucleic acids, proteins and
CC compositions used in the methods of the invention. The oligonucleotides
CC have cytostatic and antiarteriosclerotic properties, are useful as Raf-
CC inhibitors and in antisense-therapy. The methods and compositions of the
CC present invention are useful for preventing and/or treating conditions
CC associated with raf expression, such as hyperproliferative disorders,
CC atherosclerosis and tumours. This sequence represents a human b-raf
CC kinase antisense oligonucleotide.
XX
SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.4%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1465 TGAACAAATGAGTGAG 1481
Db 20 TGAACAAATGAGTGAG 4
RESULT 112
ACD42185/C
ID ACD42185 standard; DNA; 20 BP.
XX
AC ACD42185;
XX
DT 05-SEP-2003 (first entry)
XX
XX Antisense oligonucleotide targeting human b-raf, ISIS14142.
DE
XX
KW Human; ss; antisense; c-raf; a-raf; b-raf; protein kinase; cancer;
KW signal transduction; cell proliferation; lung carcinoma; cytostatic;
KW antisense gene therapy; chemotherapeutic agent; angiogenesis;
KW hyperproliferative condition; neovascularisation; ocular angiogenesis.
XX
OS Homo sapiens.
XX
XX US2003032607-A1.
XX
XX 13-FEB-2003.
XX
XX 25-JAN-2002; 2002US-00057550.
XX
XX 31-MAY-1994; 94US-00250856.
XX 31-MAY-1995; 95WO-US007111.
XX 26-NOV-1996; 96US-00756806.
XX 07-JUL-1997; 97US-00888982.
XX 06-JUL-1998; 98WO-US013961.
XX 28-AUG-1998; 98US-00143214.
XX 18-FEB-2000; 2000US-00506073.
XX
XX (MONI/) MONIA B P.
PA
XX Monia BP;
XX
XX WPI; 2003-503332/47.
XX
XX Novel antisense oligonucleotide which is targeted to mRNA encoding human
PT raf and which is capable of inhibiting raf expression, useful for
PT treating or preventing hyperproliferative conditions such as cancer.
XX
XX Example 18; Page 14; 42pp; English.
XX
CC The invention relates to an oligonucleotide 8-50 nucleotides in length
CC which is targeted to mRNA encoding human c-raf, a-raf or b-raf (raf is a
CC protein kinase playing a regulatory role in signal transduction,
CC regulating cell proliferation and has been implicated in lung carcinoma),
CC and which is capable of inhibiting raf expression. Also included is a
CC composition comprising the oligonucleotide and a pharmaceutically
CC acceptable carrier. The antisense oligonucleotide is useful for
CC inhibiting the expression of human raf in human cells or tissues, by
CC contacting the human cells or tissues with the oligo. The oligo. is also
CC is useful for treating or preventing a disease or condition associated

CC with the expression of raf by administering it in combination with a
 CC chemotherapeutic agent to a human or cells of the human, where the
 CC expression of raf is abnormal expression, and the condition is a
 CC hyperproliferative condition such as cancer, angiogenesis or
 CC neovascularisation (preferably ocular angiogenesis or
 CC neovascularisation). The oligo. is also useful for inhibiting
 CC hyperproliferation of cells. The oligos. are also useful as tools, for
 CC example for detecting and determining the role of raf expression in
 CC various cell functions and physiological processes and conditions and for
 CC diagnosing conditions associated with raf expression and for research
 CC purposes. The present sequence is an antisense oligonucleotide targeting
 CC a human raf mRNA

XX SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;
 Query Match 0.4%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.5e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1465 TGAAACAATGAGTGAG 1481
 |||||
 Db 20 TGAAACAATGAGTGAG 4

RESULT 113
 AAV37060/c
 ID AAV37060 standard; DNA; 20 BP.
 XX AC AAV37060;
 XX DT 04-SEP-1998 (first entry)
 XX DE PCR primer for antibiotic resistance gene aac6'-IIa.
 XX KW Detection; bacterial antibiotic resistance gene; bacteria;
 XX KW fungal species; identification; PCR primer; ss.
 XX OS Synthetic.
 XX PN WO9820157-A2.
 XX PD 14-MAY-1998.
 XX PF 04-NOV-1997; 97WO-CA000829.
 XX PR 04-NOV-1996; 96US-00743637.
 XX FA (IDI) IDI INFECTION DIAGNOSTIC INC.
 XX PI Bergeron MG, Picard FJ, Ouellette M, Roy PH;
 XX DR WPI, 1998-286967/25.
 XX PT Use of oligo:nucleotide primers and probes - for detection,
 XX PT identification and quantification of bacteria, fungi and bacterial
 XX PT antibiotic resistance gene(s).
 XX PS Claim 21; Page 93; 167pp; English.

XX CC PCR primers AAV37060-61 and AAV37062-63 are used to amplify antibiotic
 XX CC resistance gene aac6'-IIa. They are used in the course of the invention.
 XX CC The specification describes the use of probes and/or amplification
 XX CC primers which are specific, ubiquitous and sensitive for determining the
 XX CC presence and amount of nucleic acids from a bacterial antibiotic
 XX CC resistance gene and specific bacterial and fungal species in any sample
 XX CC suspected of containing the bacterial or fungal nucleic acids, where each
 XX CC of the nucleic acid or variant or part comprises a selected target region
 XX CC hybridisable with the probes or primers. The method of use comprises
 XX CC hybridising the sample with the probes or primers and detecting the
 XX CC presence of hybridised probes or amplified products as an indication of
 XX CC the presence of the specific bacterial or fungal species and bacterial
 XX CC antibiotic resistance genes. The methods and products can be used to
 XX CC detect and identify the bacterial and fungal species and genera and

CC determine the bacterial resistance to antibiotics
 XX SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.6e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2378 CCAGCACTTCATCCAGAGCC 2397
 |||||
 Db 20 CCAGCACTTCATCCAGAGTC 1

RESULT 114
 ACC74158
 ID ACC74158 standard; DNA; 20 BP.
 XX AC ACC74158;
 XX DT 11-JUL-2003 (first entry)
 XX DE Forward primer TLR4 for semi-quantitative PCR.
 XX KW Mouse; immunomodulator; antibacterial; immunosuppressive; CSF-1;
 XX KW colony stimulating factor-1; septic shock; TLR; toll-like receptor;
 XX KW interleukin-12; IL-12; HPRT; hypoxanthine phosphoribosyl transferase;
 XX KW PCR; primer; ss.
 XX OS Mus sp.
 XX PN WO2003028752-A1.
 XX PD 10-APR-2003.
 XX PF 03-OCT-2002; 2002WO-AU001348.
 XX PR 03-OCT-2001; 2001AU-00008071.
 XX PA (UYQU) UNIV QUEENSLAND.
 XX PI Hume DA, Sweet MJ, Stacey KJ, Seater DP;
 XX DR WPI, 2003-381587/36.
 XX PT Modulating an immune response in an animal, useful for the prophylactic
 XX PT or therapeutic treatment of bacterially-induced septic shock, by
 XX PT modulating colony stimulating factor-1 (CSF-1) activity in an animal.
 XX PS Example; Page 19; 58pp; English.

XX CC The invention relates to modulating an immune response in an animal. The
 XX CC method of the invention comprises modulating colony stimulating factor-1
 XX CC (CSF-1) activity in order to modulate the immune response of the animal.
 XX CC Also disclosed is a pharmaceutical composition comprising a modulator of
 XX CC CSF-1 activity and a pharmaceutical carrier. The method or the
 XX CC pharmaceutical composition is useful for the prophylactic or therapeutic
 XX CC treatment of bacterially-induced septic shock. The sequences given in
 XX CC records ACC74129-ACC74161 represent primers and probes used in an example
 XX CC from the invention to detect murine genes

XX SQ Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.6e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 548 ACAGAAGCTGGTGGCTGTGG 567
 |||||
 Db 1 AGAGAATCTGGTGGCTGTGG 20

RESULT 115
 ADD93829

ID ADD93829 standard; DNA; 20 BP.
XX
AC ADP93829;
XX
DT 29-JAN-2004 (first entry)
XX
DE Mouse AF06972 (mAF06972) RT-PCR primer, SEQ ID NO:18.
XX
XX Mouse; murine; AF06972; mAF06972; HJ06972; KIAA1079; AATYK homologue;
KW apoptosis-associated tyrosine kinase; apoptosis;
KW nerve cell differentiation; nerve cell proliferation; nerve cell growth;
KW nerve cell division; drug screening; transgenic animal;
KW apoptosis disorder; nerve regeneration; neurological disorder; hepatitis;
KW hepatotropic; anti-inflammatory; virucide; cytostatic;
KW reverse transcription-PCR; RT-PCR; primer; ss.
XX
OS Mus sp.
XX
XX WO2003080836-A1.
PN
XX
XX 02-OCT-2003.
PD
XX 26-MAR-2003; 2003WO-JP003713.
PF
XX 26-MAR-2002; 2002JP-00086843.
PR
XX (KAZU-) KAZUSA DNA RES INST.
PA (FUJI) FUJISAWA PHARM CO LTD.
PI Miyoshi S, Zenkoh J, Satoh S, Nishimura S;
XX WPI; 2003-865124/80.
DR
XX New polynucleotides encoding proteins useful for treating disorders
PT associated with cell growth, division and death and hepatitis.
PT
XX Example 7; SEQ ID NO 18; 142pp; Japanese.
PS
XX The invention relates to a splice variant of human HJ06972 (KIAA1079),
CC designated AF06972 (ADD93815), and nucleic acids encoding it (ADD93814).
CC Compared to the HJ06972 cDNA (ADD93812), AF06972 cDNA contains an
CC additional 94 bp exon (ADD93816) between bases 4623-4624 of HJ06972,
CC which results in a variant C-terminus (ADD93817) in AF06972. HJ06972 and
CC its splice variant AF06972 are related to apoptosis-associated tyrosine
CC kinase (AATYK), a protein which is involved in apoptosis and the
CC differentiation or proliferation of nerve cells, and are likely to have
CC similar activity. The invention also relates to vectors and host cells
CC comprising AF06972 DNA sequences, the recombinant production of AF06972
CC polypeptides, antibodies specific for AF06972, an immunoassay method
CC using the antibodies, a method for detecting apoptosis regulatory
CC activity, a method for evaluating a compound for its ability to induce
CC apoptosis or nerve cell differentiation or proliferation, and a
CC transgenic non-human animal model in which apoptosis, or nerve cell
CC division and growth has been modified. AF06972 polypeptides and
CC polynucleotides, and related compounds and methods of the invention may
CC be used in the treatment of disorders associated with apoptosis, nerve
CC cell growth and division, and hepatitis. Sequences ADD93829-ADD93830
CC represent mouse AF06972 (mAF06972) reverse transcription-PCR (RT-PCR)
CC primers used in an example of the invention.
XX
XX Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2093 AGTATCTGTTGTAGCAGTTC 2112
|||||
DB 1 AGTACTGTTGTAGAGTTC 20

RESULT 116
ABZ87635/c

ID ABZ87635 standard; DNA; 20 BP.
XX
AC ABZ87635;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
DR
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiqunone.
XX
XX Disclosure; SEQ ID NO 2877; 872pp; English.
PS
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiqunone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, have a
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiqunone or
CC receptor, producing bronchodilation, increasing levels of ubiqunone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1857 CAGCATTTCACAGTAGTCT 1876
|||||
DB 20 CAGCATTTCACAGTAGTCT 1

RESULT 117
ABD23865/c

ABD23865 standard; DNA; 20 BP.
ABD23865;
29-JUL-2004 (first entry)
Human myosin X-derived oligonucleotide SEQ ID 2877.
Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
respiratory tract inflammation; adenosine sensitivity; lung; cancer;
surfactant depletion; antiallergic; antiinflammatory; antiaerthmatic;
analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
pulmonary transplantation rejection; ss; primer.
Homo sapiens.
WO200285309-A2.
31-OCT-2002.
23-APR-2002; 2003WO-US013143.
24-APR-2001; 2001US-0286036P.
(EPITG-) EPIGENESIS PHARM INC.
Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
Miller S, Tang L, Shahabuddin S;
WPI; 2003-093058/08.
Pharmaceutical composition for treating asthma, has antisense
oligonucleotide containing less percentage of adenosine, targeted to
nucleic acids associated with lung airway or lung dysfunction, and
bronchodilating agent.
Claim 15; SEQ ID NO 2877; 763pp; English.
This invention describes a novel composition (a) a first active agent,
comprising oligonucleotides, effective for alleviating
bronchoconstriction, respiratory tract inflammation, allergies and
reducing adenosine sensitivity. Levels of adenosine (A) or (A) receptors,
surfactant depletion or hyposecretion, when administered to a mammal. The
oligonucleotides are derived from a gene encoding or regulating
expression of a target polypeptide associated with lung airway or lung
dysfunction or cancer and can be anti-sense to the corresponding mRNA.
The invention also describes a kit, that comprises: (a) a delivery
device, in separate containers, (b) the oligonucleotides, (c)
instructions for adding a carrier and for use of the kit. The composition
of the invention has antiallergic, antiinflammatory, antiaerthmatic,
analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
beta-adrenergic agonist. The composition is useful for preventing or
treating a respiratory, lung or malignant disease. The administered
composition comprises oligo and is administered to reduce the production
or availability, or to increase the degradation of the target mRNA or to
reduce the amount of target polypeptide present in the lungs. The
oligonucleotides, and/or bronchoconstriction and/or lung
inflammation, allergies and/or surfactant hypoproduction are associated
with a disease or condition such as pulmonary vasoconstriction,
inflammation, allergies, asthma, impeded respiration, respiratory
distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
transplantation rejection, pulmonary infections, bronchitis or cancer.
The reduced adenosine content of the anti-sense oligos corresponding to
thymidines present in the target RNA serves to prevent the breakdown of
the oligonucleotides into products that free adenosine into the system
e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
prevent any unwanted effects due to it
Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1857 CAGCATTTTCCAAAGTAGTCT 1876
DB 20 CAGCATTTTCCAAAGTAGTGT 1
RESULT 118
ADH66468
ID ADH66468 standard; DNA; 20 BP.
XX
AC ADH66468;
XX
XX 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #3302.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
XX WPI; 2004-035034/03.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
PS Claim 4; SEQ ID NO 3302; 985pp; English.
XX
XX The invention comprises an antisense oligonucleotides that are targeted
to nucleic acids encoding a mammalian glucocorticoid receptor. The
antisense oligonucleotides of the invention are useful for preventing or
delaying infection, inflammation or tumour formation. The antisense
oligonucleotides are also useful for treating diabetes, obesity, The
cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
present DNA sequence represents an antisense oligonucleotide that targets
the human glucocorticoid receptor gene. NOTE: The present sequence
contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
XX Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;
QY 1323 TTCAAAGGTTGCTGTCTCA 1342
DB 1 TTCAAATGTTGCTGTCTGA 20
RESULT 119
ADH66115
ID ADH66115 standard; DNA; 20 BP.
XX
XX AC ADH66115;
Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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XX 25-MAR-2004 (first entry)
DT Human glucocorticoid receptor-specific antisense oligonucleotide #2949.
DE antisense oligonucleotide; glucocorticoid receptor; infection;
XX inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA ) PHARMACIA CORP.
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 2949; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1324 TCAGAGTTGCTGTTCTCAA 1343
Db 1 TCAGATGTTGCTGTTCTGAA 20

RESULT 120
ADH67804/c
ID ADH67804 standard; DNA; 20 BP.
XX
AC ADH67804;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4638.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.

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XX 20-MAY-2003; 2003WO-US016084.
XX
XX 20-MAY-2002; 2002US-0381857P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Crosby SD, Nalseth AE;
XX
XX WPI; 2004-035034/03.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 4638; 985pp; English.
XX
XX The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 12 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.6e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 3297 CTGATATATTTTATTTTATTA 3316
Db 20 CTAATATATTTTATTTTATTTA 1

RESULT 121
AAZ25870
ID AAZ25870 standard; DNA; 21 BP.
XX
AC AAZ25870;
XX
DT 30-NOV-1999 (first entry)
XX
DE Human polymorphic region 59.
XX
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW cell viability; loss of heterozygosity; precancerous condition; ASI;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS Homo sapiens.
XX
PN WO9841648-A2.
XX
PD 24-SEP-1998.
XX
PF 19-MAR-1998; 98WO-US005419.
XX
PR 20-MAR-1997; 97US-0041057P.
XX
PA (VARI-) VARIAGENICS INC.
XX
PI Houseman D, Ledley PD, Stanton VP;
XX
XX WPI; 1998-521232/44.
XX
XX Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,

```

PT dysplastic lesions, endometriosis or graft versus host disease.

PS Example 14; Fig 1; 605pp; English.

XX This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
 CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ5812-Z26825 represent
 CC human polymorphic sites described in the method of the invention

XX Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.8; DB 1; Length 21;
 Best Local Similarity 90.0%; Pred. No. 1.7e+02;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2314 CCATTGCTGCCAATCATC 2333

DB 1 CCATTGCTGCCAATGACC 20

RESULT 122

AAV80034
 ID AAV80034 standard; DNA; 20 BP.

AC AAV80034;

DT 16-MAR-1999 (first entry)

DE Primer intU2 for SSCP analysis of PMM2 exon 5A.

KW Phosphomannomutase-2; PMM2; CDG1; mutation; human; transgenic; assay;
 KW carbohydrate-deficient glycoprotein syndrome type 1; drug screening;
 KW Jaeken disease; single-strand confirmation polymorphism; SSCP;
 KW prenatal diagnosis; PCR primer; ss.

OS Synthetic.

OS Homo sapiens.

XX WO9849324-A2.

XX 05-NOV-1998.

PF 30-APR-1998; 98WO-EP002593.

PR 30-APR-1997; 97GB-00008851.

PR 27-JAN-1998; 98GB-00001719.

XX (GENZ) GENZYME UK LTD.

XX Matthijs G;

DR WPI; 1999-024063/02.

XX New DNA encoding human phosphomannomutase or its fragments - used to
 PT detect mutations associated with carbohydrate-deficient glycoprotein
 PT syndrome-1, particularly for prenatal diagnosis.

PS Claim 5; Page 64; 104pp; English.

XX

CC The invention relates to a human phosphomannomutase-2 (PMM2) protein and
 CC the nucleotide sequence encoding the protein. The DNA or its fragments
 CC are used to detect mutation in the PMM2 genes that are associated with
 CC the carbohydrate-deficient glycoprotein syndrome type 1 (CDG1). The
 CC sequences can also be used to detect expression of PMM2-related cDNA; to
 CC express PMM2 or its mutants; and to create transgenic animals for use in
 CC drug screening and for studying expression pathways. The expressed
 CC proteins are used to screen for agents that modulate activity of PMM2,
 CC for therapy and to raise specific antibodies (for detecting PMM2 or its
 CC mutants, in competitive or capture assays). Biochemical assays for
 CC phosphomannomutase activity are used to identify possible carriers of CDG1
 CC (Jaeken disease). Measuring enzymatic activity in foetal cells (or in
 CC parental leucocytes if such cells are unavailable) and detecting
 CC mutations in the PMM2 gene makes possible a better prenatal diagnosis of
 CC CDG1. Sequences AAV80036-43 represent primers used in PCR and single-
 CC strand confirmation polymorphism (SSCP) analysis of the 8 exons of PMM2
 CC gene. These primers are used to determine the SSCP mutations in the PMM2
 CC gene.

SQ Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.8e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1640 CACAGAGCTGAGAACTT 1657

DB 2 CACAGAGCTGAGAAACAT 19

RESULT 123

ABT13876/c

ID ABT13876 standard; DNA; 20 BP.

AC ABT13876;

DT 13-FEB-2003 (first entry)

DE Human helicase-moi inhibiting oligonucleotide #1.

XX Human; antisense gene therapy; phosphorothioate backbone;
 KW antisense oligonucleotide; helicase-moi gene; inflammation; ss;
 KW helicase-moi-associated condition; infection; tumour formation;
 KW 2-MOE nucleotide; 2'-methoxyethyl nucleotide.

XX Homo sapiens.

XX US6444466-B1.

XX 03-SEP-2002.

PF 10-MAY-2001; 2001US-00853768.

PR 10-MAY-2001; 2001US-00853768.

XX (ISIS-) ISIS PHARM INC.

XX Ward DT, Watt AT;

XX WPI; 2002-749291/81.

XX Novel antisense compound for modulating expression of human helicase-moi
 PT and for treating inflammation, specifically hybridizes to a specific
 PT region in nucleic acid molecule encoding the human helicase-moi.

PS Claim 3; Col 43-44; 52pp; English.

XX The invention comprises antisense oligonucleotides which are targeted to
 CC the coding region of the human helicase-moi gene. The antisense
 CC oligonucleotides of the invention are useful for inhibiting the
 CC expression of human helicase-moi in cells or tissues, and for treating a
 CC helicase-moi-associated condition. The antisense oligonucleotides of the
 CC invention may also be used to delay infection, inflammation and tumour

CC formation. The present DNA sequence represents a human helicase-moi gene
CC antisense oligonucleotide of the invention. NOTE: The present DNA
CC sequence has a phosphorothioate backbone, bases 1-5 and 16-20 are 2'-
CC methoxyethyl (2'-MOE) nucleotides
XX
SQ Sequence 20 BP; 4 A; 4 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 613 AAACCTTGAAGAACTTA 630
Db 19 AAACCTCTGAAGAACTTA 2
RESULT 124
ADN60081/c
ID ADN60081 standard; DNA; 20 BP.
XX
AC ADN60081;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human helicase-moi, antisense oligonucleotide #1.
XX
KW Cytostatic; Antisense therapy; ss; human; helicase-moi; inflammation;
KW hyperproliferative disorder; RNA-mediated interference; probe.
XX
OS Homo sapiens.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= Other
FT /note= "Phosphorothioate linkages. All cytidines are 5'-
FT methyleytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= Other
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= Other
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003176380-A1.
XX
PD 18-SEP-2003.
XX
PF 31-MAY-2002; 2002US-00160632.
XX
PR 10-MAY-2001; 2001US-00853768.
XX
PA (WATT/) WARD D T.
PA (WATT/) WATT A T.
XX
PI Ward DT, Watt AT;
XX
DR WPI; 2003-898586/82.
XX
PT New antisense oligonucleotides for modulating helicase-moi expression,
PT useful for diagnosing, preventing or treating diseases or conditions
PT associated with helicase-moi, e.g. inflammation or hyperproliferative
PT disorders.
XX
PS Claim 3; SEQ ID NO 14; 56pp; English.
XX
CC The invention relates to antisense oligonucleotides, compositions and
CC methods for modulating the expression of helicase-moi. The
CC oligonucleotides are used in treating an animal having a disease or
CC condition associated with helicase-moi, such as inflammation, a
CC hyperproliferative disorder or a condition that arises from RNA-mediated

CC interference. The present sequence represents a human helicase-moi
CC antisense oligonucleotide.
XX
SQ Sequence 20 BP; 4 A; 4 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 613 AAACCTTGAAGAACTTA 630
Db 19 AAACCTCTGAAGAACTTA 2
RESULT 125
ADH65626
ID ADH65626 standard; DNA; 20 BP.
XX
AC ADH65626;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #2460.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
DR WPI; 2004-035034/03.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 2460; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1323 TTCAAAGGTGCTGTCT 1340
Db 3 TTCAAATGTTCTGTCT 20
RESULT 126

ADH67258
 ID ADH67258 standard; DNA; 20 BP.
 XX AC ADH67258;
 XX
 DT 25-MAR-2004 (first entry)
 DE
 DE Human glucocorticoid receptor-specific antisense oligonucleotide #4092.
 XX antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX
 OS Homo sapiens.
 XX
 PN WO2003099215-A2.
 XX
 PD 04-DEC-2003.
 XX
 XX 20-MAY-2003; 2003WO-US016084.
 PF
 PR 20-MAY-2002; 2002US-0381857P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI Crosby SD, Nalseth AE;
 XX
 DR WPI; 2004-035034/03.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 XX
 PS Claim 4; SEQ ID NO 4092; 985pp; English.
 XX
 CC The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity,
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
 XX
 SQ Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.8e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Oy 1323 TTCAAAGTTGCTGTCT 1340
 ||||| |||||
 Db 2 TTCAAATGCTGCTTCT 19
 ||||| |||||
 RESULT 127
 ADO55876
 ID ADO55876 standard; DNA; 20 BP.
 XX AC ADO55876;
 XX
 DT 12-AUG-2004 (first entry)
 DE
 DE Human NIMA-related kinase 6 DNA target sequence #30.
 XX
 XX Antisense therapy; human; NIMA-related kinase 6;
 KW never in mitosis gene a-related kinase 6; hyperproliferative disorder;
 KW cancer; cytostatic; ds.
 XX
 OS Homo sapiens.
 XX

PN US2004097441-A1.
 XX
 PD 20-MAY-2004.
 XX
 PF 16-NOV-2002; 2002US-00295471.
 XX
 PR 16-NOV-2002; 2002US-00295471.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Dobie KW;
 XX
 DR WPI; 2004-389184/36.
 XX
 XX New antisense oligonucleotides for modulating never in mitosis, gene a
 PT (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or
 PT treating diseases associated with the kinase, e.g. hyperproliferative
 PT disorders.
 XX
 PS Example 15; SEQ ID NO 122; 51pp; English.
 XX
 CC The present invention relates to antisense compounds targeted to a
 CC nucleic acid encoding human never in mitosis gene a-related kinase 6
 CC (NIMA-related kinase 6). The antisense compound comprises an antisense
 CC oligonucleotide that specifically hybridises with the nucleic acid and
 CC inhibits the expression of NIMA-related kinase 6. The antisense
 CC oligonucleotide is a chimeric oligonucleotide. The antisense
 CC oligonucleotide comprises at least one modified internucleoside linkage,
 CC preferably a phosphorothioate linkage. It also comprises at least one
 CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
 CC moiety. The antisense oligonucleotide further comprises at least one
 CC modified nucleobase, preferably a 5-methylcytosine. The antisense
 CC oligonucleotides are useful for the treatment of diseases such as
 CC hyperproliferative disorders, e.g. cancer. The present sequence
 CC represents a human NIMA-related kinase 6 DNA target sequence for an
 CC antisense oligonucleotide.
 XX
 SQ Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.8e+02;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Oy 1439 ACATCTGATTTCCAGCA 1456
 ||||| |||||
 Db 1 ACATCTGATTTCCAGCA 18
 ||||| |||||
 RESULT 128
 ADO55815/c
 ID ADO55815 standard; DNA; 20 BP.
 XX AC ADO55815;
 XX
 DT 12-AUG-2004 (first entry)
 DE
 DE Human NIMA-related kinase 6 DNA, antisense oligonucleotide #38.
 XX
 KW Antisense therapy; human; NIMA-related kinase 6;
 KW never in mitosis gene a-related kinase 6; hyperproliferative disorder;
 KW cancer; cytostatic; phosphorothioate; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide has a phosphorothioate
 FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
 FT and 3' ends, which are 5 nucleotides in length at each
 FT end. All cytidine residues are 5-methylcytidines"
 XX

PN US2004097441-A1.
XX 20-MAY-2004.
XX 16-NOV-2002; 2002US-00295471.
XX 16-NOV-2002; 2002US-00295471.
XX (ISIS-) ISIS PHARM INC.
XX Dobie KW;
XX WPI; 2004-389184/36.
XX New antisense oligonucleotides for modulating never in mitosis, gene a
PT (NIMA)-related kinase 6 expression, useful for diagnosing, preventing or
PT treating diseases associated with the kinase, e.g. hyperproliferative
PT disorders.
XX Example 15; SEQ ID NO 52; 51pp; English.
XX The present invention relates to antisense compounds targeted to a
CC nucleic acid encoding human never in mitosis gene a-related kinase 6
CC (NIMA-related kinase 6). The antisense compound comprises an antisense
CC oligonucleotide that specifically hybridizes with the nucleic acid and
CC inhibits the expression of NIMA-related kinase 6. The antisense
CC oligonucleotide is a chimeric oligonucleotide. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC preferably a phosphorothioate linkage. It also comprises at least one
CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
CC moiety. The antisense oligonucleotide further comprises at least one
CC modified nucleobase, preferably a 5-methylcytosine. The antisense
CC oligonucleotides are useful for the treatment of diseases such as
CC hyperproliferative disorders, e.g. cancer. The present sequence
CC represents an antisense oligonucleotide used in the examples of the
CC present invention.
XX Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1439 ACATCTGGATGCCAGCA 1456
DB 20 ACATCTGGATGCCAGCA 3
RESULT 129
ADN14299
ID ADN14299 standard; DNA; 21 BP.
XX AC ADN14299;
XX 15-JUL-2004 (first entry)
DE PCR primer used to amplify a murine gene SeqID 18.
XX murine; PCR; ss; antidiabetic; mouse; beta-cell hypofunction; diabetes;
KW type II diabetes; non-insulin dependent diabetes mellitus; NIDDM; primer.
XX Mus musculus.
XX WO2004035830-A1.
XX 29-APR-2004.
XX 17-OCT-2003; 2003WO-JP013311.
XX 18-OCT-2002; 2002JP-00304524.
XX (SANY) SANKYO CO LTD.
XX

PI Koga T, Taguchi T, Oshima K, Fujiwara T;
XX WPI; 2004-365167/34.
XX Evaluating substances for treating functional failure in B-cells caused
PT by diabetes.
XX Example 4; SEQ ID NO 18; 142pp; Japanese.
XX This invention relates to a novel method for evaluating substances for
CC their effectiveness in treating beta-cell hypofunction. Specifically, it
CC refers to the beta cells of the pancreas islets that normally function to
CC synthesize and secrete insulin in response to glucose in the blood. The
CC present invention describes measuring the expression levels of at least
CC one of eight specific genes in the presence of a test substance, to
CC indicate its effectiveness in treating beta-cell hypofunction.
CC Accordingly, this method can be used in the treatment of diabetes, in
CC particular type II diabetes (or non-insulin dependent diabetes mellitus,
CC NIDDM). This oligonucleotide is a murine PCR primer given in an
CC exemplification of the invention.
XX Sequence 21 BP; 7 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 16.4; DB 1; Length 21;
Best Local Similarity 94.4%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 753 GTTCTACATCAAAATGCC 770
DB 3 GCTCTACATCAAAATGCC 20
RESULT 130
AAT10575
ID AAT10575 standard; DNA; 21 BP.
XX AC AAT10575;
XX 05-SEP-1996 (first entry)
XX Cbeta-specific primer H3Cbeta3.
XX Polymerase chain reaction; PCR; primer; amplify; human; T cell receptor;
KW beta chain; TCR; myelin basic protein; BP; autoantigen; encephalitogen;
KW experimental autoimmune encephalomyelitis; EAE; multiple sclerosis; MS;
KW autoimmune disease; neurological disease; cerebrospinal fluid; therapy;
KW central nervous system; complementarity determining region; CDR;
KW T lymphocyte; optical nerve damage; anterior chamber inflammation; ss.
XX Synthetic.
XX WO9601329-A1.
XX 18-JAN-1996.
XX 26-JUN-1995; 95WO-US008086.
XX 01-JUL-1994; 94US-00270634.
XX (CONN-) CONNECTIVE THERAPEUTICS INC.
XX Vandenbark AA, Offner H, Buenafe A;
XX WPI; 1996-087679/09.
XX Methods for diagnosis and immune-related therapy of autoimmune diseases -
PT partic. multiple sclerosis, by detecting marker T cell receptor V gene
PT bias and treating patients with selected V beta peptide(s).
XX Example 1; Page 26; 62pp; English.
XX AAT10575 and AAT10576 represent amplification primers specific for the
CC human T cell receptor beta (TCRbeta) chain of the myelin basic protein
CC

CC (BP). BP is the major autoantigen involved in experimental autoimmune
 CC encephalomyelitis (EAE), and is the leading candidate as an
 CC encephalitogen involved in multiple sclerosis (MS). By detecting the
 CC presence of a marker TCR variable (V) gene bias in a body fluid which
 CC encapsulates all or a portion of the target organ, an autoimmune disease
 CC (such as a neurological disease) in a human can be identified. This
 CC method can also be carried out to detect the presence of a biased motif
 CC common to T cell receptors specific for the pathogenic antigen in a non-
 CC target tissue or organ. By analysing the Vbeta gene repertoire of
 CC cerebrospinal fluid (CSF), and determining the presence of a Vbeta gene
 CC bias, an immune-related disease that targets the presence of a Vbeta gene
 CC can be diagnosed. Therapeutic Vbeta peptide sequences can be selected to
 CC use as treatment of a disease or condition. The selection is carried out
 CC by identifying a Vbeta gene bias in a body fluid that is not the target
 CC tissue or organ of the disease, and selecting an immunogenic peptide
 CC corresponding to the Vbeta gene bias. MS can be treated by identifying
 CC the complementarity determining region 2 (CDR2) of a V gene peptide on
 CC the surface of a T lymphocyte in the CSF of a patient and administering a
 CC peptide corresponding to this region. These methods can also be used for
 CC the diagnosis and immune-related therapy of optical nerve damage and
 CC anterior chamber inflammation as well as other human neurological
 CC diseases
 XX
 SQ Sequence 21 BP; 4 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 2e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2496 CTGCTCAGGCAGCAGGTGGAG 2516
 DB 1 CTGCTCAGGCAGTATCTGGAG 21
 |||||

RESULT 131
 AA08680/C
 ID AAV08680 standard; DNA; 21 BP.
 XX
 AC AAV08680;
 XX
 DT 15-FEB-1999 (first entry)
 XX
 DE Primer ATP/17PB for human ACE gene.
 XX
 KW PCR primer; human; ACE; angiotensin converting enzyme; angiotensinogen;
 KW cardiovascular status; AGT; ATII; type 1 angiotensin II receptor; stroke;
 KW polymorphic pattern; blood pressure; electrocardiographic profile;
 KW cardiac condition diagnosis; myocardial infarction; atherosclerosis;
 KW hypertension; cardiovascular disease; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9845477-A2.
 XX
 PD 15-OCT-1998.
 XX
 PF 01-APR-1998; 98WO-IB000475.
 XX
 PR 04-APR-1997; 97US-0042930P.
 XX
 PA (EURO-) EURONA MEDICAL AB.
 XX
 PI Norberg LT, Andersson MK, Lindstroem PHR;
 XX
 DR WPI; 1998-568361/48.
 XX
 PT Assessing cardiovascular status in humans by polymorphic analysis - of
 PT genes for angiotensin converting enzyme, angiotensinogen and angiotensin
 PT II receptor, used to diagnose predisposition to disease and to predict
 PT effect of therapy.
 XX
 PS Example 1; Page 32; 71pp; English.

XX This sequence represents a PCR primer for the human ACE (angiotensin
 CC converting enzyme) gene, and can be used in the method of the invention.
 CC The method is for assessing cardiovascular status in humans by
 CC determining the sequence of at least one polymorphic site in the ACE
 CC (angiotensin converting enzyme), AGT (angiotensinogen) and/or ATII (type 1
 CC angiotensin II receptor) genes, and comparing the polymorphic pattern
 CC with that in patients with predetermined markers of status. The method is
 CC used to assess blood pressure or electrocardiographic profile, to
 CC diagnose a cardiac condition such as (silent) myocardial infarction (MI),
 CC hypertension, atherosclerosis or stroke. They can also be used to predict
 CC response to treatments with ACE inhibitors, angiotensin II receptor
 CC antagonists, diuretics, alpha- or beta-adrenergic receptor antagonists,
 CC etc. It is also used to identify susceptibility to cardiovascular
 CC disease. Libraries of nucleic acids containing polymorphic positions in
 CC the 3 genes, and libraries of targets corresponding to the peptides from
 CC the genes are used to screen for cardiovascular agents. The nucleic acids
 CC contained in the library can be used as source of probes
 XX
 SQ Sequence 21 BP; 4 A; 8 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 2e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 27 AGTGAGGATGATGCCAGGATG 47
 DB 21 AGTGAGGTTGATGCCAGGAAG 1
 |||||

RESULT 132
 AAA95550/C
 ID AAA95550 standard; DNA; 21 BP.
 XX
 AC AAA95550;
 XX
 DT 31-JAN-2001 (first entry)
 XX
 DE TCR Valpha 2 subfamily probe VA02-2.
 XX
 KW Detection; diagnostic; Kawasaki disease; T-cell; PCR primer; probe;
 KW gene expression; ss.
 XX
 OS Homo sapiens.
 XX
 PN JP2000157297-A.
 XX
 PD 13-JUN-2000.
 XX
 PF 01-DEC-1998; 98JP-00341661.
 XX
 PR 01-DEC-1998; 98JP-00341661.
 XX
 PA (SHIO) SHIONOGI & CO LTD.
 XX
 DR WPI; 2000-477722/42.
 XX
 PT Detection of Kawasaki disease factor, useful for the diagnosis of
 PT Kawasaki disease, comprises detecting an increase in Vbeta6.5 positive T-
 PT cells.
 XX
 PS Example 1; Page 6; 36pp; Japanese.
 XX
 CC The invention relates to a method of detecting Kawasaki disease by
 CC detecting an increase in Vbeta6.5 or Vbeta6.5/Vbeta2.1 positive T-cells.
 CC The sequences AAA95531-A95626 represent primers and probes used to PCR
 CC amplify and detect the level of expression of Valpha and Vbeta genes in T
 CC -cells in Kawasaki disease
 XX
 SQ Sequence 21 BP; 8 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 2e+02;

```
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 409 TGCTGGATTATCCAGGTGTG 429
Db 21 TGCTGGATTATCCACCTGTG 1
RESULT 133
AAC61308/c
ID AAA38308 standard; DNA; 21 BP.
XX
AC AAA38308;
XX
DT 21-AUG-2000 (first entry)
XX
DE Human AT1 regulatory region PCR primer, SEQ ID NO:108.
XX
KW Angiotensin II receptor type 1 gene; AT1; regulatory region;
KW polymorphism; polymorphic marker; cardiovascular disease;
KW myocardial infarction; unstable angina; hypertension; atherosclerosis;
KW stroke; prognosis; drug screening; treatment outcome; human; PCR primer;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200022166-A2.
XX
PD 20-APR-2000.
XX
PF 13-OCT-1999; 99WO-IB001678.
XX
PR 14-OCT-1998; 98US-0104286P.
PR 14-OCT-1998; 98US-0104302P.
XX
PA (EURO-) EURONA MEDICAL AB.
XX
PI Norberg LT, Andersson MK, Lindstrom PHR, Jonsson L;
XX
DR WPI; 2000-318010/27.
XX
PT Assessing cardiovascular status in humans involves comparing test
PT polymorphic pattern comprising polymorphic positions within genes
PT encoding specific proteins, with reference polymorphic pattern.
XX
PS Example 1; Page 53; 126pp; English.
XX
CC The invention relates to a novel method of assessing the cardiovascular
CC status in an individual and to newly identified polymorphisms in the
CC genes encoding angiotensin-converting enzyme (ACE), angiotensin II
CC receptor type 1 (AT1) and type 2 (AT2), angiotensinogen (AGT), renin,
CC aldosterone synthase, endothelin receptor type A and beta-adrenergic
CC receptors 1 and 2. The method comprises determining the sequence at one
CC or more polymorphic positions within these genes, and comparing the
CC pattern of polymorphisms from the individual with a reference polymorphic
CC pattern obtained from a population of individuals exhibiting a
CC predetermined cardiovascular disease status. The polymorphic markers are
CC useful for determining the predisposition of an individual to
CC cardiovascular disorders such as myocardial infarction, unstable angina,
CC hypertension, atherosclerosis and stroke. They are also useful for
CC predicting the likely cardiovascular status of a patient given a
CC treatment regimen comprising administration of cardiovascular drugs
CC (e.g., ACE inhibitors, beta-adrenergic receptor antagonists (beta-
CC blockers) or calcium channel blockers). One or more polymorphic markers
CC provides a basis for predicting the outcome of a treatment regimen.
CC Fragments of the genes comprising a polymorphic site may be used as
CC primers and probes for detecting genetic polymorphisms or in molecular
CC library arrays for high throughput screening. The genes, and the proteins
CC they encode are useful in the screening of potential cardiovascular
CC drugs. Determination of an individual's polymorphic pattern reduces or
CC eliminates trial and error in selecting a treatment for a particular
CC individual cardiovascular patient. It also provides the ability to
CC eliminate patients from clinical trials who are predicted to be non-
CC responsive, or at a risk for an adverse response, to a particular
```

```
CC treatment regimen. Adverse results in an early trial can be evaluated to
CC identify polymorphic patterns so that the adverse results can be
CC correlated with a sub-population of the test population, permitting
CC exclusion of such sub-populations from the treatment group. Beneficial
CC drugs can be approved for use in the appropriate population, thereby
CC decreasing the number of patients required for a clinical trial, which in
CC turn decreases the duration and cost of such trials. Sequences AAA38296-
CC A38315 represent PCR primers used in an exemplification of the invention
CC to amplify short fragments of the human angiotensin II receptor type 1
CC (AT1) gene regulatory region (AAA38331) for sequence determination
XX
SQ Sequence 21 BP; 4 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 16.2; DB 1; Length 21;
Best Local Similarity 85.7%; Pred. No. 2e+02; 3; Indels 0; Gaps 0;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 27 AGTGAGGATGATGCCAGGATG 47
Db 21 AGTGAGGTTGATGCCAGAAAG 1
RESULT 134
AAC61308/c
ID AAC61308 standard; DNA; 21 BP.
XX
AC AAC61308;
XX
DT 30-JAN-2001 (first entry)
XX
DE Human ACE, AGT and AT1 genes polymorphisms PCR primer SEQ ID NO: 108.
XX
KW Human; genetic polymorphism; disease diagnosis; treatment; cancer;
KW cardiovascular system; nervous system; glaucoma; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200056922-A2.
XX
PD 28-SEP-2000.
XX
PF 23-MAR-2000; 2000WO-GB001102.
XX
PR 23-MAR-1999; 99US-0126046P.
PR 23-MAR-1999; 99WO-IB000497.
PR 24-MAR-1999; 99US-0126243P.
PR 23-DEC-1999; 99US-00471890.
XX
PA (GEMI-) GEMINI GENOMICS AB.
XX
PI Lindstrom PHR, Norberg LT, Jonsson L, Olaisson E, Sanders R;
XX
DR WPI; 2000-638268/61.
XX
PT Assessing disease status in individual by determining sequence(s) at one
PT or more polymorphic positions within the human genes encoding the
PT protein(s) involved in physiological pathway associated with treatment
PT regime.
XX
PS Example 1; Page 61; 141pp; English.
XX
CC The present invention is related to methods for determining the
CC polymorphic pattern of an individual and using the results to determine
CC their risk of a number of diseases, including cancer, cardiovascular
CC diseases, glaucoma and nervous system disorders such as depression and
CC neurodegenerative diseases. In addition, the methods can be used to
CC determine the effects of different types of treatment for individuals,
CC and thus enables appropriate therapies to be prescribed. The PCR primers
CC shown in sequences AAC61201-C61371 were all used to demonstrate the
CC methods of the invention
XX
SQ Sequence 21 BP; 4 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
```

Query Match 0.4%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 2e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 27 AGTGAGGATGATGCCAGGATG 47
 DB 21 AGTGAGGTTGATGCCAGGAAG 1

RESULT 135
 AAF60173
 ID AAF60173 standard; DNA; 21 BP.
 XX
 AC AAF60173;
 XX
 DT 27-APR-2001 (first entry)
 XX
 DE Human ATM gene exon 31 reverse primer.
 XX
 KW Human; ATM; ataxia telangiectasia; mutation detection;
 KW single-stranded conformation polymorphism; SSCP; electrophoresis;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200107660-A1.
 XX
 PD 01-FEB-2001.
 XX
 PF 21-JUL-2000; 2000WO-US020011.
 XX
 PR 23-JUL-1999; 99US-00360416.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Gatti RA;
 XX
 DR WPI; 2001-168574/17.
 XX
 PT Detecting a mutation or polymorphism in human ataxia telangiectasia gene
 PT or polyexonic eukaryotic gene, involves using mega-single stranded
 PT conformation polymorphism analysis.
 XX
 PS Claim 7; Page 53; 118pp; English.
 XX
 CC The present sequence is one of a number of primers used in a method for
 CC detecting a mutation or a polymorphism in the human ATM gene, which is
 CC associated with the disease ataxia telangiectasia, or a polyexonic
 CC eukaryotic gene of at least 4 kb. The method uses an improved version of
 CC single-stranded conformation polymorphism (SSCP) electrophoresis that
 CC allows electrophoresis of two or three amplified segments in a single
 CC lane. The method is useful for screening large, complex polyexonic
 CC eukaryotic genes such as the ATM gene for mutations and polymorphisms.
 CC The new mutations and polymorphisms in the ATM gene are useful for
 CC performing more accurate screening of human DNA samples for mutations,
 CC for distinguishing mutations from polymorphisms, and for improving the
 CC efficiency of automated screening methods. The mega-SSCP method provides
 CC a screening method of genes for multiple polymorphisms and mutations at
 CC once. The method is particularly suitable for large, polyexonic,
 CC eukaryotic genes, having mutations and polymorphisms at many points and
 CC not merely at one or a few hot spots. Note: the SEQ ID assigned to this
 CC sequence in the disclosure and claims of the specification is one
 CC number lower than the number given in the sequence listing

Sequence 21 BP; 13 A; 2 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 2e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1842 AAAAAACAGGAACACTACAGCAT 1862
 DB 1 AAAAAACAGGAACAGGAT 21

RESULT 136
 ABA05093
 ID ABA05093 standard; DNA; 21 BP.
 XX
 AC ABA05093;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Dipeptide aminopeptidase 28 DNA related oligonucleotide #8.
 XX
 KW Human; dipeptide aminopeptidase 28; cancer; nosohaemia; cytostatic;
 KW anti-HIV; immunosuppressive; antiinflammatory; HIV infection;
 KW immunological disease; inflammation; gene therapy; ds.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT CDS 1..21
 FT /tag= a
 FT /product= "AAM47329"
 FT /partial
 FT /note= "the sequence contains no start or stop codon"

CN1307129-A.
 XX
 PN 08-AUG-2001.
 XX
 PD 03-FEB-2000; 2000CN-00112673.
 XX
 PR 03-FEB-2000; 2000CN-00112673.
 XX
 PA (JINP-) JINPENG BIO TECH CO LTD SHANGHAI.
 XX
 PI Wang J, Wang S, Tong B;
 XX
 DR WPI; 2002-034896/05.
 XX
 P-PSDB; AAM47329.
 XX
 PT New polypeptide for treating malignant tumors and HIV infection,
 PT comprises the human dipeptide aminopeptidase.
 XX
 PS Disclosure; Page 5 (Disclosure); 11pp; Chinese.
 XX
 CC The present invention provides the protein and coding sequences of human
 CC dipeptide aminopeptidase 28. The sequences can be used in the treatment
 CC of cancer, nosohaemia, HIV infection, immunological diseases and
 CC inflammation. The present sequence is a coding sequence fragment
 CC described in the exemplification of the invention

Sequence 21 BP; 9 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 2e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1127 AAGGGTAAAGACTTTCTTA 1147
 DB 1 AAGGGTAAAGACGTTATTTA 21

RESULT 137
 ADK00166/c
 ID ADK00166 standard; DNA; 21 BP.
 XX
 AC ADK00166;
 XX
 DT 03-JUN-2004 (first entry)
 XX
 DE Murine pmn sequence tagged site PCR primer #2.
 XX
 KW nervous system; Tbc gene; CofE protein; tubulin-specific chaperone;

KW alpha-tubulin; beta-tubulin; progressive motor neuropathy; pnm;
 KW chromosome 13; neuroprotective; nontropic; antiparkinsonian;
 KW degenerative nerve disease; nerve injury; intoxication;
 KW Alzheimer's disease; Parkinson's disease; neuropathy; multiple sclerosis;
 KW ss; primer; PCR.
 XX
 OS Mus sp.
 XX
 PN WO2004020661-A2.
 XX
 PD 11-MAR-2004.
 XX
 PF 31-JUL-2003; 2003WO-DE002589.
 XX
 PF 26-AUG-2002; 2002DE-0103961.
 XX
 PR (MEDL-) MEDLNNOVA GES MEDIZINISCHE INNOVATIONEN.
 XX
 PA Sendtner M, Boemmel H;
 PI WPI; 2004-227242/21.
 DR
 DR New mutant form of the Tbc gene, useful for identifying diagnostic and
 PT therapeutic agents for degenerative nerve diseases.
 PT
 XX Example 1; Fig 1; 34pp; German.
 PS
 XX This invention describes a novel isolated nucleic acid used in a test
 CC system for discovering active agents for treating diseases of the nervous
 CC system. The nucleic acid is a mutant form of the murine Tbc gene which
 CC encodes the CofE protein, a tubulin-specific chaperone essential for
 CC complexation of alpha- and beta-tubulins. The mutant gene has a T to G
 CC alteration at position 1682, resulting in Gly rather than Trp at C-
 CC terminal position 524 of the CofE protein (corresponding to position 527
 CC of the human protein). This mutation is responsible for progressive motor
 CC neuropathy (pnm) in mice. For diagnosis, a tissue sample or body fluid is
 CC contacted with the identified diagnostic agent and binding determined,
 CC qualitatively or (semi)quantitatively. The mutant Tbc gene may be
 CC diagnosed by in vitro hybridisation to mutation-specific probes or by
 CC using an antibody specific for the mutated protein. The system is
 CC contacted with test compound and either the survival rate or the
 CC formation of embryonal tubulin isoforms, class III beta-tubulin, ordered
 CC tubulin aggregates, microtubuli and/or axons determined and optionally
 CC compared with results of controls and/or of cells treated with a
 CC reference compound. Compounds are selected if they increase cell survival
 CC or modify formation of tubulin and/or axons. The novel mutation was
 CC identified in pnm/pnm mice by typing a 31 cm region of chromosome 13. The
 CC products of the invention have neuroprotective, nontropic and
 CC antiparkinsonian activity and can be used and its derived peptide to
 CC identify agents for diagnosis of degenerative nerve diseases and nerve
 CC injury caused by intoxication and/or for treating nervous system
 CC disorders such as Alzheimer's disease, Parkinson's disease, neuropathy
 CC and multiple sclerosis. Tbc or its mutants are also useful in diagnosing
 CC and treating the disorders. This sequence represents an inverse PCR
 CC primer used to amplify murine pnm candidate region sequence tagged sites
 CC (STS) found in YAC and BAC clones.
 XX
 SQ Sequence 21 BP; 5 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 16.2; DB 1; Length 21;
 Best Local Similarity 85.7%; Pred. No. 2e+02;
 Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 342 GACCTGAGCTTTAATCCCGTG 362
 DB 21 GACCTGAGCTTTAATCCCGAG 1
 RESULT 138
 ADE27067
 ID ADE27067 standard; RNA; 19 BP.
 XX
 AC ADE27067;

XX 29-JAN-2004 (first entry)
 DT Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:11.
 DE short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
 XX stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX
 OS Synthetic.
 XX
 PN WO2003070885-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 13-FEB-2003; 2003WO-US004317.
 XX
 PF 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Thompson J;
 XX WPI; 2003-721687/68.
 DR
 DR New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 XX
 PS Example 3; SEQ ID NO 11; 139pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of the SCD (stearyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
 CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
 CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
 CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
 CC virucide activities. The siNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siNA, which is
 CC used in the exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 2 A; 10 C; 5 G; 0 T; 2 U; 0 Other;
 Query Match 0.4%; Score 16; DB 1; Length 19;
 Best Local Similarity 87.5%; Pred. No. 1.8e+02;
 Matches 14; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 190 CTCGGAGCCTCAGCC 205
 DB 4 CUCGGAGCCUCAGCC 19
 RESULT 139
 ADE27357/C
 ID ADE27357 standard; RNA; 19 BP.
 XX
 AC ADE27357;
 XX

```
DT 29-JAN-2004 (first entry)
XX Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:301.
DE short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
XX stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX Synthetic.
OS
XX WO2003070885-A2.
PN
XX 28-AUG-2003.
PD
XX 13-FEB-2003; 2003WO-US004317.
PF
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 20-SEP-2002; 2002US-0412304P.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J, Beigelman L, Thompson J;
PI WPI; 2003-721687/68.
XX
DR New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearoyl-CoA desaturase gene.
XX
XX Example 3; SEQ ID NO 301; 139pp; English.
PS
XX The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
CC by RNA interference. Also described: (1) modulating expression of SCD
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
CC virucide activities. The siNAs can be used to modulate expression of SCD
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
CC They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents an SCD siNA, which is
CC used in the exemplification of the present invention.
XX
XX Sequence 19 BP; 2 A; 5 C; 10 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.4%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.8e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 190 CTCGGAGCCTCAGCC 205
DB 16 CTCGGAGCCTCAGCC 1
RESULT 140
AAT77163/c
ID AAT77163 standard; DNA; 20 BP.
XX
XX AAT77163;
XX
DT 24-OCT-1997 (first entry)
```

```
XX Batten disease gene exon 4 PCR primer.
DE
XX Batten disease; ceroid lipofuscinosis; CLN3; diagnosis; human;
KW gene therapy; polymerase chain reaction; PCR; primer; ss.
XX Synthetic.
OS
XX WO9708308-A1.
PN
XX 06-MAR-1997.
PD
XX 30-AUG-1996; 96WO-US013896.
PF
XX 31-AUG-1995; 95US-0003030P.
PR (GEO) GEN HOSPITAL CORP.
PA (UYLE-) RIJKSUNIV LEIDEN.
XX
XX Lerner TJ, Taschner PEM, Breuning MH, Gusella JF, Mole SE;
PI Gardiner MR;
XX
XX WPI; 1997-179265/16.
DR
XX Batten disease polypeptide - useful to correct absence of wild type
PT polypeptide, or as agonist to enhance activity of wild type polypeptide.
XX
XX Disclosure; Page 31; 94pp; English.
XX
XX PCR primers (AAT61331 and AAT77159-86) were designed for amplification of
CC the human Batten disease CLN3 gene (see also AAT61306) exons 1-15. The
CC PCR primers for exon 4 are given in AAT77163 and AAT77164. Novel
CC mutations (see also AAT61332-48) have been discovered in the CLN3 gene of
CC Ed patients using a combination of PCR, single strand conformation
CC polymorphism analysis and direct sequencing
XX
XX Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2274 CAGCTCTGCTTCACT 2289
DB 19 CAGCTCTGCTTCACT 4
RESULT 141
ABS65155/c
ID ABS65155 standard; DNA; 20 BP.
XX
XX ABS65155;
AC
XX 15-NOV-2002 (first entry)
DT
XX
XX Mouse casein kinase 2-beta antisense oligonucleotide #14.
DE
XX
XX ss; antisense; casein kinase2-beta; mouse; antisense gene therapy;
KW cystostatic; antidiabetic; antiinflammatory; diabetes; cancer; tumour;
KW hyperproliferative disorder; breast cancer; prostate cancer;
KW liver cancer.
XX
XX Mus musculus.
OS
XX
XX Key modified_base 1. .20 Location/Qualifiers
FT /tag= a
FT /mod_base= OTHER
FT /note= "All cytidines are 5-methylcytidines"
FT modified_base 1. .20
FT /tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
```

FT modified_base 1..5
 FT /tag= c
 FT /mod_base= OTHER
 FT /note="2'-methoxyethyl residues"
 FT modified_base 16..20
 FT /tag= d
 FT /mod_base= OTHER
 FT /note="2'-methoxyethyl residues"

XX WO200262954-A2.

XX 15-AUG-2002.

XX 31-JAN-2002; 2002WO-US003159.

XX 08-FEB-2001; 2001US-00780175.

XX (ISIS-) ISIS PHARM INC.

XX McKay R, Freier SM, Wyatt JR;

XX WPI; 2002-643409/69.

XX New antisense oligonucleotides targeted to nucleic acid encoding Casein
 PT kinase 2-beta, useful in diagnostic and research applications, or for
 PT treating a disease or condition associated with the expression of Casein
 PT kinase 2-beta.

PS Claim 3; Page 94; 142pp; English.

XX The invention relates to a compound that is 8 - 50 nucleobases in length
 CC targeted to a nucleic acid molecule encoding Casein kinase 2-beta, and
 CC which specifically hybridises with and inhibits the expression of Casein
 CC kinase 2-beta, or which specifically hybridises with an 8-nucleobase
 CC portion of an active site on a nucleic acid molecule encoding Casein
 CC kinase 2-beta. Also included are: (1) a composition comprising the
 CC compound, and a carrier or diluent; (2) inhibiting the expression of
 CC Casein kinase 2-beta in cells or tissues by contacting the cells or
 CC tissues with the compound so that the expression of Casein kinase 2-beta
 CC is inhibited; and (3) treating an animal having a disease or condition
 CC associated with Casein kinase 2-beta by administering to the animal the
 CC new compound so that the expression of Casein kinase 2-beta is inhibited.
 CC The antisense compounds are useful for modulating the expression of
 CC Casein kinase 2-beta and for treating diseases or conditions associated
 CC with expression of Casein kinase 2-beta, e.g. diabetes or
 CC hyperproliferative disorders, particularly cancer, such as breast cancer,
 CC prostate cancer, or liver cancer. The antisense compounds are also useful
 CC for diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay
 CC infection, inflammation or tumour formation, as research reagents and
 CC kits, and in distinguishing between functions of various members of a
 CC biological pathway. The present sequence is an antisense oligonucleotide
 CC of the invention targeting mouse casein kinase 2-beta

XX Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

SQ Query Match 0.4%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 988 CTGCTCTAGAGGCCT 1003
 Db | | | | | | | | | |
 16 CTGCTCTAGAGGCCT 1

RESULT 142

AA09330

ID AA09330 standard; DNA; 19 BP.

XX AA09330;

XX 24-MAR-1999 (first entry)

XX Human biallelic polymorphic marker upstream primer #210.

XX Polymorphism; biallelic; human; forensic; paternity testing; disease;
 KW detection; phenotypic typing; characteristic; infection; hereditary;
 KW autoimmune disease; cancer; inflammation; drug; therapy; medicament;
 KW treatment; marker; primer; ss.
 XX Synthetic.
 OS Homo sapiens.
 XX WO9820165-A2.
 XX 14-MAY-1998.
 XX 05-NOV-1997; 97WO-US020313.
 XX 06-NOV-1996; 96US-0030455P.
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 XX Lander ES, Wang D, Hudson T;
 XX WPI; 1998-286974/25.
 XX New isolated nucleic acid segments from the human genome - used for
 PT determining polymorphic forms for use in e.g. forensics, paternity
 PT testing or phenotypic typing for disease.
 XX Claim 15; Page 71; 310pp; English.

XX AA09121-X10268 are allele-specific oligonucleotide primers used in the
 CC isolation of various biallelic polymorphic markers found in the human
 CC genome (represented in AA010269-X12937). These primers can be used in a
 CC method for determining polymorphic forms in an individual for use in e.g.
 CC forensics, paternity testing or for phenotypic typing for diseases such
 CC as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
 CC dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
 CC hypercholesterolemia, polycystic kidney disease, tuberous sclerosis, Ehlers-Danlos
 CC spherocytosis, von Willebrand's disease, familial colonic polyposis, hereditary
 CC haemorrhagic telangiectasia, familial acute intermittent porphyria,
 CC syndrome, osteogenesis imperfecta, acute intermittent porphyria,
 CC autoimmune diseases, inflammation, cancer, diseases of the nervous
 CC system, infection by pathogenic microorganisms, and characteristics such
 CC as longevity, appearance (e.g. baldness, obesity), strength, speed,
 CC endurance, fertility, and susceptibility or receptivity to particular
 CC drugs or therapeutic treatments. The isolated polymorphic nucleic acid
 CC segments can also be used to produce medicaments for the treatment or
 CC prophylaxis of such diseases

SQ Sequence 19 BP; 5 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.9e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 186 CAGACTCCGAGCCTCAGC 204
 Db | | | | | | | | | |
 1 CAGACTCTGAGCCACAGC 19

RESULT 143

ACC70795

ID ACC70795 standard; DNA; 19 BP.

XX ACC70795;

XX 20-NOV-2003 (first entry)

XX Human Toll-like receptor 4, Tlr-4, PCR primer #1.

XX Human; PCR; primer; vulnery; anti-tumour; antirheumatic; antiarthritic;
 KW antiarteriosclerotic; cytostatic; neointima; scar; plaque; blood vessel;
 XX Toll-like receptor 4; adventitial cell; Tlr-4; ss.

OS Homo sapiens.
 PN EP1302206-A1.
 XX
 PD 16-APR-2003.
 XX
 PF 11-OCT-2001; 2001EP-00203846.
 XX
 PR 11-OCT-2001; 2001EP-00203846.
 XX
 PA (UYUT-) UNIV UTRECHT MEDISCH CENT.
 PA (UYUT-) RIJKSUNIV UTRECHT.
 XX
 PI De Kleijn DPV, Pasterkamp G;
 XX WPI; 2003-484923/46.
 XX
 PT Interfering with the formation of a neointima/scar and/or a plaque in a
 PT blood vessel, useful for modulating tumor growth, comprises providing a
 PT ligand capable of modulating Toll-like receptor activity of adventitial
 PT cells.
 XX
 PS Disclosure; Page 7; 23pp; English.
 XX
 CC The present invention relates to a method for interfering with the
 CC formation of a neointima/scar and/or a plaque in a blood vessel by
 CC providing a ligand capable of modulating Toll-like receptor activity of
 CC adventitial cells. The method is useful for reducing the formation of a
 CC neointima/scar and/or a plaque in a blood vessel after stenting,
 CC angioplasty, heart transplantation, by pass surgery, arteriovenous
 CC shunting and infection, especially bacterial infection. The method is
 CC also useful for modulating tumour growth, and for modulating the effects
 CC of rheumatoid arthritis. The present sequence is a PCR primer for human
 CC Toll-like receptor 4 (Tlr-4)
 XX
 SQ Sequence 19 BP; 3 A; 8 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.9e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2273 TCAGCTCTGCCTTACTAC 2291
 DB 1 TCAGCTCTGCCTTACTAC 19
 RESULT 144
 ADE78588
 ID ADE78588 standard; DNA; 19 BP.
 XX
 AC ADE78588;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Endogenous carotenoid gene expression RT-PCR primer #12.
 XX
 KW metabolite; carotene; plant; carotene hydroxylase; lycopene beta-cyclase;
 KW beta-carotene hydroxylase; zeaxanthin; beta-carotene;
 KW oxygenated carotenoid; RT-PCR; primer; carotenoid; ss.
 XX
 OS Unidentified.
 PN
 XX EPI323825-A2.
 XX
 PD 02-JUL-2003.
 XX
 PF 08-NOV-2002; 2002EP-00425681.
 XX
 PR 09-NOV-2001; 2001IT-RM000670.
 XX
 PA (CNEN) ENEA ENTE NUOVE TECNOLOGIE ENERGIA.
 PA (BIOJ) BIOGEN SRL.
 XX

PI Giuliano G, Rosati C, Dharmapuri S, Fallara P, Camara B;
 XX WPI; 2003-714401/68.
 XX
 PT Increasing the metabolites of carotene content in a plant useful for
 PT producing recombinant plants comprises upregulating a gene encoding
 PT carotene hydroxylase activity.
 XX
 PS Example 1; Page 12; 21pp; English.
 XX
 CC The invention relates to a novel process for increasing the metabolites
 CC of carotene content of a plant. The novel process comprises upregulating
 CC at least one gene which encodes carotene hydroxylase activity. The
 CC compositions of the novel process have lycopene beta-cyclase or a beta-
 CC carotene hydroxylase activity. The process is useful for increasing the
 CC metabolites of carotene content of a plant, comprising transforming a
 CC plant cell from which viable plants may be recovered, using a plant
 CC expression cassette, or a DNA construct, and generating viable plants
 CC from the cell. The carotene metabolites are useful for increasing
 CC zeaxanthin and beta-carotene, including oxygenated carotenoids. This
 CC polynucleotide sequence represents an RT-PCR primer used in the process
 CC for the expression of the introduced proteins and endogenous carotenoid
 CC genes of the invention.
 XX
 SQ Sequence 19 BP; 2 A; 6 C; 3 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.9e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1716 TCAGCTCTGCCTTACTAC 1734
 DB 1 TCAGCTCTGCCTTACTAC 19
 RESULT 145
 ADF75738/C
 ID ADF75738 standard; RNA; 19 BP.
 XX
 AC ADF75738;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Antisense siNA that down regulates human PTP-1B expression (SeqID 279).
 XX
 KW human; ss; siRNA; short interfering nucleic acid; siNA;
 KW protein tyrosine phosphatase-1B; PTP-1B; RNA interference; RNAi;
 KW micro-RNA; miRNA; short hairpin RNA; shRNA; gene silencing; antisense;
 KW obesity; insulin resistance; diabetes; anorectic; antidiabetic;
 KW antisense.
 XX
 OS Homo sapiens.
 XX
 PN WO2003070881-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 11-FEB-2003; 2003WO-US004123.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 26-JUL-2002; 2002US-0206705.
 PR 29-AUG-2002; 2002US-0466784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen J, Beigelman L, Usman N;
 XX WPI; 2003-697604/66.
 DR

```
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity, downregulates expression of a protein tyrosine
PT phosphatase-1B gene.
XX
XX Example 3; SEQ ID NO 279; 140pp; English.
XX
XX This invention relates to novel short interfering nucleic acid (siNA)
CC molecules that downregulate expression of a protein tyrosine phosphatase-
CC 1B (PTP-1B) gene by RNA interference (RNAi). Specifically, the siNAs can
CC be short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA
CC (miRNA) or short hairpin RNA (shRNA), all of which can mediate inhibition
CC of PTP-1B. The present invention describes sequence-specific post-
CC transcriptional gene silencing in animals using siNA molecules and
CC antisense oligonucleotides to modulate PTP-1B gene expression or
CC activity. Furthermore, these siNA molecules provide useful reagents for a
CC variety of therapeutic and diagnostic purposes, and as such can be used
CC for treating obesity, insulin resistance or diabetes (types I and II), as
CC well as for drug screening, target identification and validation, genetic
CC engineering, pharmacogenomics and for studying gene function and gene
CC mapping (for example of single-nucleotide polymorphisms). Accordingly,
CC these molecules exhibit anorectic and antidiabetic activities. This
CC oligonucleotide sequence is an antisense siNA molecule that targets human
CC PTP-1B RNA of the invention.
XX
XX Sequence 19 BP; 7 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.9e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3162 TGCCCTTCCTCCATTTTAAAGT 3180
DB 19 TGCCCTTCCTCCATTTTAAAGT 1
RESULT 146
ADF75553
ID ADF75553 standard; RNA; 19 BP.
XX
XX ADF75553;
XX
XX 26-FEB-2004 (first entry)
XX
XX Sense siNA that down regulates human PTP-1B expression (SeqID 94).
DE
XX human; ss; siRNA; short interfering nucleic acid; siNA;
XX protein tyrosine phosphatase-1B; PTP-1B; RNA interference; RNAi;
XX micro-RNA; miRNA; short hairpin RNA; shRNA; gene silencing; antisense;
XX obesity; insulin resistance; diabetes; anorectic; antidiabetic.
XX
XX Homo sapiens.
XX
XX WO2003070881-A2.
XX
XX 28-AUG-2003.
XX
XX 11-FEB-2003; 2003WO-US004123.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 26-JUL-2002; 2002US-0206705.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J, Beigelman L, Usman N;
PI
XX WPI; 2003-697604/66.
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```
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity, downregulates expression of a protein tyrosine
PT phosphatase-1B gene.
XX
XX Example 3; SEQ ID NO 94; 140pp; English.
XX
XX This invention relates to novel short interfering nucleic acid (siNA)
CC molecules that downregulate expression of a protein tyrosine phosphatase-
CC 1B (PTP-1B) gene by RNA interference (RNAi). Specifically, the siNAs can
CC be short interfering RNA (siRNA), double-stranded RNA (dsRNA), micro-RNA
CC (miRNA) or short hairpin RNA (shRNA), all of which can mediate inhibition
CC of PTP-1B. The present invention describes sequence-specific post-
CC transcriptional gene silencing in animals using siNA molecules and
CC antisense oligonucleotides to modulate PTP-1B gene expression or
CC activity. Furthermore, these siNA molecules provide useful reagents for a
CC variety of therapeutic and diagnostic purposes, and as such can be used
CC for treating obesity, insulin resistance or diabetes (types I and II), as
CC well as for drug screening, target identification and validation, genetic
CC engineering, pharmacogenomics and for studying gene function and gene
CC mapping (for example of single-nucleotide polymorphisms). Accordingly,
CC these molecules exhibit anorectic and antidiabetic activities. This
CC oligonucleotide sequence is a sense siNA molecule that targets human PTP-
CC 1B RNA of the invention.
XX
XX Sequence 19 BP; 2 A; 7 C; 3 G; 0 T; 7 U; 0 Other;
SQ
Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 52.6%; Pred. No. 1.9e+02;
Matches 10; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
QY 3162 TGCCCTTCCTCCATTTTAAAGT 3180
DB 1 UGCCCCUCCACUUGAGU 19
RESULT 147
ADG34714/c
ID ADG34714 standard; RNA; 19 BP.
XX
XX ADG34714;
XX
XX 26-FEB-2004 (first entry)
XX
XX Human TNF siNA oligonucleotide SEQ ID NO:66.
DE
XX RNA interference; short interfering nucleic acid; siNA;
XX short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX short hairpin RNA; shRNA; expression modulation; gene therapy;
XX drug screening; diagnosis; therapeutic target identification;
XX pharmacogenomics; gene function analysis; gene mapping;
XX tumour necrosis factor; TNF; human; DNA-RNA hybrid; ss; antibacterial;
XX immunosuppressive; antirheumatic; antiarthritic; anti-HIV; antipsoriatic;
XX antiinflammatory; septic shock; rheumatoid arthritis; HIV/AIDS;
XX psoriasis; inflammation; autoimmune disease; target sequence.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO2003070897-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US004741.
XX
XX 20-FEB-2002; 2002US-0358580P.
XX
XX 11-MAR-2002; 2002US-0363124P.
XX
XX 06-JUN-2002; 2002US-0386782P.
XX
XX 29-AUG-2002; 2002US-0406784P.
XX
XX 05-SEP-2002; 2002US-0408378P.
XX
XX 09-SEP-2002; 2002US-0409293P.
XX
XX 28-NOV-2002; 2002US-0429359P.
XX
XX 15-JAN-2003; 2003US-0440129P.
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XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J, Beigelman L;
XX DR WPI; 2003-697609/66.
XX DR
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of septic shock or rheumatoid arthritis, downregulates
XX PT expression of the tumor necrosis factor gene.
XX PS Example 3; SEQ ID NO 66; 141pp; English.
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of the human tumour necrosis factor (TNF) gene by
XX CC RNA interference. The siNAs may or may not comprise ribonucleotides and
XX CC may be double or single stranded. They further comprise a sense and
XX CC antisense regions, or alternatively are assembled from a sense
XX CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
XX CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
XX CC (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
XX CC chemically modified, can contain deoxyribonucleotides, and can be
XX CC synthetically synthesised, expressed from a vector or enzymatically
XX CC synthesised. The invention also relates to kits for the in vitro or in
XX CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
XX CC that express siNA. The siNAs are used to modulate expression of the TNF
XX CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
XX CC therapy), or in grafts and transplants for the treatment of a variety of
XX CC conditions. The TNF siNAs have antibacterial, immunosuppressive,
XX CC antiinflammatory activities. They may be used for treating septic shock,
XX CC rheumatoid arthritis, HIV/AIDS, psoriasis, inflammation and autoimmune
XX CC diseases. The siNAs are also useful for drug screening, diagnosis,
XX CC therapeutic target identification and validation, genetic engineering,
XX CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
XX CC single nucleotide polymorphisms). The present sequence represents the
XX CC upper strand of a human TNF-targeted double-stranded siNA, which is
XX CC identical to the TNF transcript target sequence.
XX SQ Sequence 19 BP; 4 A; 5 C; 3 G; 0 T; 7 U; 0 Other;
    Query Match 0.4%; Score 15.8; DB 1; Length 19;
    Best Local Similarity 89.5%; Pred. No. 1.9e+02;
    Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3414 TTTCAGGAAGTATGGA 3432
DB 19 TTCTCAAGGAAGTCTGAAA 1
RESULT 148
ADG34802
ID ADG34802 standard; RNA; 19 BP.
XX AC ADG34802;
XX DT 26-FEB-2004 (first entry)
XX DE Human TNF siNA oligonucleotide SEQ ID NO:154.
XX KW RNA interference; short interfering nucleic acid; siNA;
XX KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
XX KW short hairpin RNA; shRNA; expression modulation; gene therapy;
XX KW drug screening; diagnosis; therapeutic target identification;
XX KW pharmacogenomics; gene function analysis; gene mapping;
XX KW tumour necrosis factor; TNF; human; DNA-RNA hybrid; ss; antibacterial;
XX KW immunosuppressive; antiinflammatory; antiarthritic; anti-HIV; antipsoriatic;
XX KW antiinflammatory; septic shock; rheumatoid arthritis; HIV/AIDS;
XX KW psoriasis; inflammation; autoimmune disease.
OS Synthetic.
OS Homo sapiens.
XX

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PN XX WO2003070897-A2.
PD XX 28-AUG-2003.
PF XX
PP XX 20-FEB-2003; 2003WO-US004741.
PR XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 28-NOV-2002; 2002US-0429359P.
PR 15-JAN-2003; 2003US-0440129P.
XX (RIBO-) RIBOZYME PHARM INC.
PA Mcswiggen J, Beigelman L;
PI WPI; 2003-697609/66.
XX DR
XX PT New short interfering nucleic acid, useful e.g. for treatment and
XX PT diagnosis of septic shock or rheumatoid arthritis, downregulates
XX PT expression of the tumor necrosis factor gene.
XX PS Example 3; SEQ ID NO 154; 141pp; English.
XX CC The invention relates to short interfering nucleic acids (siNA) which
XX CC downregulate expression of the human tumour necrosis factor (TNF) gene by
XX CC RNA interference. The siNAs may or may not comprise ribonucleotides and
XX CC may be double or single stranded. They further comprise a sense and
XX CC antisense regions, or alternatively are assembled from a sense
XX CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
XX CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
XX CC (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
XX CC chemically modified, can contain deoxyribonucleotides, and can be
XX CC synthetically synthesised, expressed from a vector or enzymatically
XX CC synthesised. The invention also relates to kits for the in vitro or in
XX CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
XX CC that express siNA. The siNAs are used to modulate expression of the TNF
XX CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
XX CC therapy), or in grafts and transplants for the treatment of a variety of
XX CC conditions. The TNF siNAs have antibacterial, immunosuppressive,
XX CC antiinflammatory activities. They may be used for treating septic shock,
XX CC rheumatoid arthritis, HIV/AIDS, psoriasis, inflammation and autoimmune
XX CC diseases. The siNAs are also useful for drug screening, diagnosis,
XX CC therapeutic target identification and validation, genetic engineering,
XX CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
XX CC single nucleotide polymorphisms). The present sequence represents the
XX CC upper strand of a human TNF-targeted double-stranded siNA, which is
XX CC identical to the TNF transcript target sequence.
XX SQ Sequence 19 BP; 7 A; 3 C; 5 G; 0 T; 4 U; 0 Other;
    Query Match 0.4%; Score 15.8; DB 1; Length 19;
    Best Local Similarity 68.4%; Pred. No. 1.9e+02;
    Matches 13; Conservative 4; Mismatches 2; Indels 0; Gaps 0;
QY 3414 TTTCAGGAAGTATGGA 3432
DB 1 UCUCAGGAAGCUCUGAAA 19
RESULT 149
ADG78541/c
ID ADG78541 standard; DNA; 19 BP.
XX AC ADG78541;
XX DT 16-DEC-2004 (first entry)
XX DE Human apolipoprotein B (ApoB) oligonucleotide seqid 3026.
XX

```


CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a human apolipoprotein B (ApoB) antisense oligonucleotide that
 CC can be used to control ApoB gene expression.

XX Sequence 19 BP; 9 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.9e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3699 AGATGTTTATTTTTCAG 3717
 ||||| ||||| ||||| ||||| |||||
 DB 19 AGATGTTAGTTTTCAG 1

RESULT 151

AAV52720
 ID AAV52720 standard; DNA; 20 BP.

XX AAV52720;

XX 22-JUL-1999 (first entry)

DE Modified oligonucleotide containing N3'-P5' phosphoramidates.

XX Oligodeoxyribonucleotide; intersubunit linkage;
 KW phosphoramidate intersubunit; antisense activity; nuclease resistant;
 KW in-vitro cell growth inhibition assay; infection;
 KW smooth muscle cell proliferation disorder; inflammatory process;
 KW genetic disorder; cancer; ss.

XX Synthetic.

XX Key Location/Qualifiers

PH modified_base 1..8

FT /tag= a
 FT /note= "each base is linked by N3'-P5' phosphoramidate
 linkages"

XX WO9525814-A1.

XX 28-SEP-1995.

XX 20-MAR-1995; 95WO-US003575.

XX 18-MAR-1994; 94US-00210505.

XX 18-MAR-1994; 94US-00214599.

XX (LYNX-) LYNX THERAPEUTICS INC.

XX PI Gryaznov SM, Schultz RG, Chen J;

DR WPI; 1995-344627/44.

XX Oligo:nucleotide N3'-P5' phosphoramidate(s) - have improved resistance
 PT toward phosphodiesterase digestion, and form stable duplexes with DNA and
 PT RNA strands.

PS Disclosure; Page 55; 101pp; English.

XX The specification describes oligodeoxyribonucleotides having contiguous
 CC nucleoside subunits joined by intersubunit linkages, where at least 3
 CC contiguous subunits are joined by phosphoramidate intersubunits. The
 CC oligodeoxyribonucleotides has a sequence of nucleoside subunits effective
 CC to form a duplex with a target nucleic acid molecule. The
 CC oligodeoxyribonucleotides are more resistant to nuclease digestion and
 CC have improved RNA and dsDNA hybridisation characteristics, relative to
 CC oligonucleotides not containing N3'-P5' phosphoramidate linkages. They
 CC also have excellent antisense activity against complementary mRNA targets
 CC in in-vitro cell growth inhibition assays. They also exhibit low
 CC cytotoxicity. They may be used in diagnostic and therapeutic
 CC applications, e.g., in combatting infectious agents such as bacteria,
 CC viruses, etc. or in treatment of smooth muscle cell proliferation
 CC disorders, inflammatory processes, certain genetic disorders, cancers,
 CC etc.. The present sequence represents an oligonucleotide of the invention

XX Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3303 TATTTTATTTTATATAT 3321

||| | ||||| |||||
 DB 1 TATATATTTTATATAT 19

RESULT 152

AAV52722/c
 ID AAV52722 standard; DNA; 20 BP.

XX AAV52722;

XX 21-DEC-1998 (first entry)

XX DCOH (PCBD) gene exon 4 PCR primer.

XX Hepatocyte nuclear factor 1 beta; HNF-1 beta; MODY4; human;
 KW transcription factor; maturity onset diabetes of the young; TCF2;
 KW diabetes; NIDDM; diagnosis; therapy; DCOH; PCBD; PCR; primer; ss.

OS Synthetic.

OS Homo sapiens.

XX WO9811254-A1.

XX 19-MAR-1998.

XX 10-SEP-1997; 97WO-US016037.

XX 10-SEP-1996; 96US-0025719P.

PR 02-OCT-1996; 96US-0028056P.

PR 30-OCT-1996; 96US-0029679P.

XX (ARCH-) ARCH DEV CORP.

XX Bell GI, Yamagata K, Oda N, Kaisaki PJ, Furuta H, Menzel S;

PI Horikawa Y;

XX WPI; 1998-271667/24.

XX Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and 1-
 PT beta - useful for detecting susceptibility for non-insulin dependent
 PT diabetes, especially maturity-onset diabetes of the young.

PS Example 8; Page 146; 363pp; English.

XX This is a reverse PCR primer designed for use with a forward primer (see CC AAV52721) in the PCR amplification of exon 4 of the human DCOH (PCBD) CC gene. The bifunctional DCOH/PCBD protein stabilises dimers of hepatocyte CC nuclear factor-1 beta (HNF-1 beta, see AAW71581) with itself or with HNF- CC 1 alpha (see AAW71559). Mutations of HNF are associated with MODY CC (maturity onset diabetes of the young) type diabetes. No diabetes- CC associated mutations were found in DCOH

XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

QY 3068 TGACTGAACCTGGGTGTTC A 3086
 |||||
 DB 20 TGACTGAACCTGGGAGTCCA 2

RESULT 153
 AAV48008/c
 ID AAV48008 standard; DNA; 20 BP.
 AC AAV48008;
 XX
 DT 19-OCT-1998 (first entry)
 XX
 DE Human B7-1 targetted oligonucleotide 12370.
 XX
 KW ss; human; B7; T cell; inflammation; autoimmune disease; cell activation;
 KW cell proliferation.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 modified_base 1..5
 FT /tag= a
 FT /note= "Optional phosphorothioate linkages, optionally
 modified with 2'-fluoro-1 or 2'-methoxyethoxy"
 FT modified_base 6..14
 FT /tag= b
 FT /note= "Phosphorothioate linkages"
 FT modified_base 14..20
 FT /tag= c
 FT /note= "optionally modified with 2'-methoxyethoxy"
 FT modified_base 15..20
 FT /tag= d
 FT /note= "Optional phosphorothioate linkages, optionally
 modified with 2'-fluoro-1"

PN WO9829124-A1.
 XX
 PD 09-JUL-1998.
 XX
 PF 16-DEC-1997; 97WO-US0232270.
 XX
 PR 31-DEC-1996; 96US-00777266.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Bennett CF, Vickers TA;
 XX
 DR WPI; 1998-387783/33.
 XX
 PT New oligo:nucleotide(s) that modulate expression of B7 proteins - used
 PT for, e.g. controlling activation and proliferation of T cells,
 PT particularly for treatment, diagnosis and prevention of inflammation.
 XX
 PS Example 1; Page 35; 120pp; English.

CC The oligonucleotides which specifically hybridise to B7 modulate its
 CC expression (and thus T cell activation and proliferation). This is
 CC particularly useful for treatment and prevention of inflammation and
 CC autoimmune diseases, e.g. asthma, (juvenile) diabetes, myasthenia gravis,
 CC Grave's disease, rheumatoid arthritis, allograft rejection, psoriasis,
 CC (systemic) lupus erythematosus, multiple sclerosis, contact dermatitis,
 CC rhinitis, allergy, cancer and metastases. The oligonucleotides may also
 CC be used to manipulate T cell activation ex vivo; to determine or detect
 CC B7 protein expression; for diagnosis; as assay and purification reagents,
 CC and to study physiological roles of B7 proteins

XX Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

QY 3766 TGGCTGGGATCCCTCCCT 3784
 |||||
 DB 20 TGGCTGGGATCCCTCTCT 2

RESULT 154
 AAZ37657/c
 ID AAZ37657 standard; DNA; 20 BP.
 XX
 AC AAZ37657;
 XX
 DT 07-JAN-2000 (first entry)
 XX
 DE Human mdm2 phosphorothioate oligodeoxynucleotide #187.
 XX
 KW Human mdm2 gene; proliferation; tumour; phosphorothioate; p53; cancer;
 KW antisense; modulation; oligonucleotide; expression; inhibition;
 KW hyperproliferation; blood cancer; brain cancer; breast cancer;
 KW lung cancer; soft tissue cancer; psoriasis; fibrosis; atherosclerosis;
 KW restenosis; ss.

XX Synthetic.
 OS
 OS Homo sapiens.
 XX
 PN WO9949065-A1.
 XX
 PD 30-SEP-1999.
 XX
 PF 26-MAR-1999; 99WO-US006702.
 XX
 PR 26-MAR-1998; 98US-00048810.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowseert LM;
 XX
 DR WPI; 1999-610754/52.
 XX
 PT New antisense compounds used to treat eg. hyperproliferative conditions.
 XX
 PS Example 9; Page 52; 157pp; English.

XX AAZ37473-237738 represent human mdm2 phosphorothioate oligonucleotides.
 CC AAZ37471, AAZ37472, AAZ37739, AAZ37740 and AAZ37741 are used in the
 CC exemplification of the present invention. The present invention describes
 CC novel nucleotide antisense compounds, targeted to the 5' untranslated,
 CC translation termination codon, or 3' untranslated region of a nucleic
 CC acid encoding human mdm2, that modulates expression of human mdm2. The
 CC oligonucleotides mediate their effect by antisense inhibition of
 CC hyperproliferative gene expression. The antisense compound is used to
 CC treat an animal having a disease or condition associated with mdm2.
 CC particularly a hyperproliferative condition, more particularly cancer,
 CC especially of the blood, brain, breast, lung or soft tissue, or
 CC psoriasis, fibrosis, atherosclerosis or restenosis

XX Sequence 20 BP; 0 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

```
Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2916 AAGGAACCATGACAAAGA 2934
DB 19 AAGAACCACGACAAAGA 1

RESULT 155
AAX36672
ID AAX36672 standard; DNA; 20 BP.
XX AC AAX36672;
XX AC AAX36672;
DT 13-JUL-1999 (first entry)
XX PCR primer for marker D6S967.
XX PCR primer; detection; glaucoma allele; haplotype analysis; human; GLC1B;
KW chromosome 2; chromosome 6; GLC6p25; haplotype profile;
KW presymptomatic glaucoma; symptomatic glaucoma; ss.
XX Synthetic.
OS Homo sapiens.
XX WO9916899-A2.
XX 08-APR-1999.
PD 29-SEP-1998; 98WO-CA000924.
XX 30-SEP-1997; 97CA-02217097.
XX (UYLA-) UNIV LAVAL.
XX Raymond V, Morissette J, Falardeau P, Cote G, Anctil J;
PI WPI; 1999-263704/22.
XX Haplotype analyses for indirect detection of glaucoma.
XX Claim 18; Page 28; 41pp; English.
XX This sequence represents a PCR primer used in the method of the
CC invention. The method is for detecting the presence of alleles for
CC glaucoma comprising haplotype analysis of human chromosome 2 and 6
CC respectively, where the haplotypes are associated with loci GLC1B and
CC GLC6p25 respectively. The primers are used to amplify gene sequences to
CC generate information necessary to compile haplotype profiles. The
CC haplotype profiles can be used to detect presymptomatic and symptomatic
CC glaucoma. They can also be used to localise, isolate and identify the
CC GLC1B and GLC6p25 loci so that detection of individuals with glaucoma is
CC enhanced. The haplotype analyses also provide means for identification
CC and following of mutant alleles in pedigrees or populations.
CC Identification of presymptomatic individuals using the methods allows
CC intervention in the disease process and obviates the impact of inheriting
CC a mutant allele causing disease, by medically disrupting the initiation
CC or progression of the disease
XX Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3735 GGACCTATGATCTATTTA 3753
DB 1 GGACTGTGATCTATTTA 19

RESULT 156
```

```
AAA41139
ID AAA41139 standard; DNA; 20 BP.
XX AC AAA41139;
XX 16-AUG-2000 (first entry)
XX Human TNFalpha antisense oligonucleotide ISIS# 104785.
XX Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;
KW tumour necrosis factor alpha; inflammatory bowel disease; diabetes;
KW rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;
KW pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
KW inflammatory disease; ss.
XX Synthetic.
XX WO2000020645-A1.
XX 13-APR-2000.
XX 05-OCT-1999; 99WO-US023205.
XX 05-OCT-1998; 98US-00166186.
XX 18-MAY-1999; 99US-00313932.
XX (ISIS-) ISIS PHARM INC.
XX Baker BF, Bennett CF, Butler MM, Shanahan WJ;
PI WPI; 2000-303808/26.
XX Oligonucleotide for treating diseases associated with human tumor
PT necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid
PT arthritis, comprises nucleotide sequence complementary to intron of
PT nucleic acid encoding TNF-alpha.
XX Example 22; Page 104; 283pp; English.
XX This sequence represents an antisense oligonucleotide sequence which
CC targets a region of the human tumor necrosis factor alpha (TNFalpha)
CC nucleotide sequence. TNFalpha is an important cytokine that plays a role
CC in host defence. It is produced mainly in macrophages and monocytes in
CC response to infection, invasion, injury or inflammation. Overexpression
CC of TNFalpha can result in disease states, particularly in infectious,
CC inflammatory and autoimmune diseases. The invention relates to antisense
CC oligonucleotides, such as that represented by the present sequence which
CC are capable of modulating the TNFalpha gene expression. The
CC oligonucleotides optionally have a phosphorothioate backbone, and may
CC also optionally contain at least one 2'-O-methoxyethyl modification. The
CC oligonucleotides are useful for modulating the expression of human
CC TNFalpha in cells and tissues, reducing a human cell inflammatory
CC response, reducing the blood glucose level in a human and treating a
CC human having a disease or condition associated with TNFalpha. Examples of
CC diseases associated with TNFalpha include diabetes, inflammatory bowel
CC disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,
CC infectious disease, hepatitis, atopic dermatitis or allograft rejection.
CC The antisense oligonucleotides are also useful for modulating the
CC function of a selected nucleic acid sequence in adipose tissue
XX Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3414 TTTCAGGAGATGTGGAAA 3432
DB 1 TCTCAGGAGATGTGGAAA 19

RESULT 157
AAF32850/c
```

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ID AAF32850 standard; DNA; 20 BP.
XX
AC AAF32850;
XX
XX 23-MAR-2001 (first entry)
XX
XX Human B7-1 mRNA antisense oligonucleotide SEQ ID NO: 47.
XX
XX Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
KW autoimmune disorder; phosphorothioate backbone; ss.
XX
XX Homo sapiens.
XX
XX WO200074687-A1.
XX
XX 14-DEC-2000.
XX
XX 25-MAY-2000; 2000WO-US014471.
XX
XX 04-JUN-1999; 99US-00326186.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Vickers TA, Karras JG;
XX
XX WPI; 2001-049991/06.
XX
XX Novel compound for diagnosing, preventing and treating immune disorders,
PT comprising an oligonucleotide that specifically hybridizes with a nucleic
PT acid sequence encoding B7 protein.
XX
XX Example 1; Page 47; 162pp; English.
XX
XX The present invention provides sequences of antisense oligonucleotides
CC targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
CC The antisense sequences have phosphorothioate backbones and some
CC nucleotides are 2'-methoxyethoxy residues. The sequences can be used in
CC the treatment of inflammatory and autoimmune disorders, including asthma,
CC juvenile diabetes mellitus, myasthenia gravis, Graves' disease,
CC rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
CC multiple sclerosis, psoriasis, systemic lupus erythematosus, contact
CC dermatitis, rhinitis, allergies and cancer
XX
XX Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3766 TGGCTGGGATCCCTCCCT 3784
DB 20 TGGCTGGGATCCCTTCCT 2

RESULT 158
AAF80811/c
ID AAF80811 standard; DNA; 20 BP.
XX
XX AAF80811;
XX
XX 02-MAY-2001 (first entry)
XX
XX Human mdm2 phosphorothioate oligonucleotide #185.
XX
XX Antisense; mdm2; hyperproliferation; cancer; psoriasis; ss.
XX
XX Homo sapiens.
XX
XX US6184212-B1.
XX
XX 06-FEB-2001.
XX
XX 26-MAR-1999; 99US-00280805.
XX
XX
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XX 26-MAR-1998; 98US-00048810.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowseert LM;
XX
XX WPI; 2001-190948/19.
XX
XX Novel antisense compound 8-30 nucleobases in length targeted to a nucleic
PT acid molecule encoding human mdm-2 useful for modulating the expression
PT of human mdm-2 and reducing hyperproliferation of human cells.
XX
XX Example 9; Col 31; 77pp; English.
XX
XX The present invention relates to an antisense compound 8-30 nucleobases
CC in length targeted to nucleobases 1-308 of the 5' untranslated region,
CC 1776-1806 of the translation termination codon region or 1818-2370 of the
CC 3' untranslated region of a nucleic acid molecule encoding human mdm-2.
CC The invention is useful for reducing hyperproliferation of human cells,
CC modulating the expression of mdm2 in human cells or tissues or in vitro.
CC The hyperproliferative disorder includes cancer or psoriasis
XX
XX Sequence 20 BP; 0 A; 4 C; 4 G; 12 T; 0 U; 0 Other;
XX
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2916 AAGGAACCCATGCACAAAGA 2934
DB 19 AAGGAACCCACACAAAGA 1

RESULT 159
AAS29426/c
ID AAS29426 standard; DNA; 20 BP.
XX
XX AAS29426;
XX
XX 21-NOV-2001 (first entry)
XX
XX Human mdm2 antisense oligonucleotide 31768.
XX
XX Human; mdm2; hyperproliferative disorder; cancer; psoriasis;
KW atherosclerosis; tumour; cytostatic; anti psoriatic;
KW anti arteriosclerotic; vasotropic; antisense; phosphorothioate; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /mod_base= OTHER
FT /note= "OTHER= All phosphorothioate linkages,
FT additionally bases 1-6 and bases 15-20 are 2'-O-
FT methoxyethyl bases, and bases 7-14 are deoxynucleotides"
XX
XX US2001016575-A1.
XX
XX 23-AUG-2001.
XX
XX 02-JAN-2001; 2001US-00752983.
XX
XX 26-MAR-1998; 98US-00048810.
XX
XX 26-MAR-1999; 99US-00280805.
XX
XX (MIRA/) MIRAGLIA L J.
XX
XX (NERO/) NERO P.
XX
XX (GRAH/) GRAHAM M J.
XX
XX (MONI/) MONIA B P.
XX
XX (COWS/) COWSEERT L M.
XX
```

PI Miraglia LJ, Nero P, Graham MJ, Monia BP, Cowsett LM;
 XX WPI; 2001-535565/59.
 XX
 XX An antisense compound, useful for treating e.g. cancer, comprises
 PT nucleobases targeted a region (e.g. translation termination codon region)
 PT of a nucleic acid encoding human mdm2.
 XX
 XX Example 9; Page 17; 81pp; English.
 XX
 CC The present invention relates to antisense compounds, 8-30 nucleobases in
 CC length targeted to the 5' untranslated region, translation termination
 CC codon region, 3' untranslated region, coding region or translation start
 CC site of a nucleic acid encoding human mdm2, where the antisense compound
 CC modulates the expression of human mdm2. The antisense oligonucleotides of
 CC the invention are useful for encoding human mdm2 and for inhibiting the
 CC expression of human mdm2. They may be used for treating an animal having
 CC a disease or condition associated with amplification of mdm2 gene or
 CC overexpression of mdm2 e.g. a hyperproliferative disorder such as cancer
 CC (blood, brain, breast, lung, or a soft tissue cancer) and psoriasis,
 CC fibrosis, atherosclerosis or restenosis, tumours, colorectal carcinoma
 CC and chronic myelogenous leukemia. The antisense compound may be
 CC administered with a chemotherapeutic agent to overcome drug resistance.
 CC The antisense compound reduces hyperproliferation of human cells. The
 CC method, which involves the use of the antisense compound, is also useful
 CC for detecting the role of mdm2 expression in various cell functions and
 CC physiological processes and useful in both clinical research and
 CC diagnostic tools. AAS29242-AAS29507 represent the human mdm2 antisense
 CC oligonucleotides of the present invention
 XX
 SQ Sequence 20 BP; 0 A; 4 C; 4 G; 12 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2916 AAGGAACCCATGACAAAGA 2934
 Db 19 AAGGAACCCATGACAAAGA 1
 |||||
 |||||
 RESULT 160
 ABN79736/c
 ID ABN79736 standard; DNA; 20 BP.
 AC ABN79736;
 XX
 XX 29-JUL-2002 (first entry)
 DT Human Fas target oligonucleotide #51.
 DE
 XX
 XX Human; immunosuppressive; antiinflammatory; hepatotropic; cytostatic;
 KW vasotropic; hepatitis; cancer; allograft rejection; ds; Fas.
 XX
 OS Homo sapiens.
 XX
 XX US2002004490-A1.
 PN
 XX 10-JAN-2002.
 PD
 XX
 XX 09-MAR-2001; 2001US-00802669.
 PF
 XX
 XX 12-APR-1999; 99US-00290640.
 PR 18-SEP-2000; 2000US-00685615.
 PR
 XX (DEAN/) DEAN N M.
 PA (MARC/) MARCUSSEN E G.
 PA (WYAT/) WYATT J.
 PA (ZHAN/) ZHANG H.
 XX
 XX Dean NM, Marcusson EG, Wyatt J, Zhang H;
 PI WPI; 2002-204886/26.
 DR

XX Novel antisense compound targeted to nucleic acid encoding Fas, Fas ligand,
 PT ligand or Fas associated protein-1 is useful for inhibiting expression of
 PT Fas, Fas ligand, or Fas-1 in cells or tissues, and for treating
 PT hepatitis.
 XX
 XX Example 18; Page 24; 84pp; English.
 XX
 CC This invention relates to an antisense compound encoding Fas, Fas ligand,
 CC or Fas associated protein-1 (Fap-1). The inhibition of Fas mediated
 CC signalling is thought to be immunosuppressive, antiinflammatory,
 CC hepatotropic, cytostatic and vasotropic. Antisense oligonucleotides were
 CC designed to target human Fas. Oligonucleotides were synthesised as
 CC chimeric oligonucleotides and are useful for treating an animal having an
 CC autoimmune or inflammatory disease e.g., hepatitis, cancer, a condition
 CC associated with apoptosis, allograft rejection, or ischemia reperfusion
 CC injury. Optionally, the above mentioned conditions are prevented by
 CC contacting the allograft with the antisense oligonucleotide. The
 CC oligonucleotides are used in diagnostics, therapeutics, prophylaxis and
 CC as research reagents and in kits. The oligonucleotides are also useful
 CC for research purposes. The present nucleotide sequence is related to
 CC human Fas
 XX
 SQ Sequence 20 BP; 9 A; 1 C; 0 G; 10 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 861 TTAAGAAATAATTTTGATA 879
 Db 20 TTAAGAAATAATTTTGATA 2
 |||||
 |||||
 RESULT 161
 ACD05367
 ID ACD05367 standard; DNA; 20 BP.
 XX
 XX ACD05367;
 AC
 XX 05-AUG-2003 (first entry)
 DT Tumour necrosis factor alpha antisense oligonucleotide #370.
 DE
 XX
 XX Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
 KW aniarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
 KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
 KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
 KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
 KW antisense technology; ss.
 XX
 OS Synthetic.
 XX
 XX US2003022848-A1.
 PN
 XX 30-JAN-2003.
 PD
 XX 02-APR-2001; 2001US-00824322.
 PF
 XX 05-OCT-1998; 98US-00166186.
 PR 18-MAY-1999; 99US-00313932.
 PR
 XX (BAKE/) BAKER B F.
 PA (BENN/) BENNETT C F.
 PA (BUTL/) BUTLER M M.
 PA (SHAN/) SHANAHAN W R.
 XX
 XX Baker BF, Bennett CF, Butler MM, Shanahan WR;
 PI WPI; 2003-447433/42.
 DR
 XX Treating inflammatory disorders such as inflammatory bowel disease,
 PT Crohn's disease or rheumatoid arthritis, in a subject, by administering

PT oligonucleotide which inhibits expression of human tumor necrosis factor
PT alpha.

XX Example 24; Page 39; 142pp; English.

XX The invention describes a method of treating an inflammatory disorder in
CC an individual, comprising administering to the individual an
CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
CC method is useful for treating an inflammatory disorder such as
CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
CC arthritis, in an individual. The method is also useful for treating
CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
CC and hepatitis in an individual. This sequence represents an antisense
CC oligonucleotide used to modulate expression of tumour necrosis factor
CC alpha (TNF-alpha)

XX Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02; Length 20;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3414 TTCTCAAGGAAGTATGGAAA 3432

Db 1 TCTCAAGGAAGTCTGGAAA 19

RESULT 162

ADD21622/c

ID ADD21622 standard; DNA; 20 BP.

XX ADD21622;

AC ADD21622;

XX 15-JAN-2004 (first entry)

DE Human mdm2 antisense oligonucleotide #185.

XX antisense oligonucleotide; human; mdm2; hyperproliferation;
KW hyperproliferative disorder; cancer; psoriasis; fibrosis;
KW atherosclerosis; restenosis; apoptosis modulation; p21; ss;
KW 2'-methoxyethoxy-residue; phosphorothioate backbone.

XX Homo sapiens.

XX WO2003048315-A2.

XX 12-JUN-2003.

XX 02-DEC-2002; 2002WO-US038281.

XX 04-DEC-2001; 2001US-00005344.

XX (ISIS-) ISIS PHARM INC.

XX Miraglia LJ, Nero PS, Graham MJ, Monia BP, Koller E, Chiang MY;
PI Manoharan M;

XX WPI; 2003-577263/54.

XX Novel antisense compound targeted to 5' untranslated region, coding
PT region, or intron:exon junction of nucleic acid molecule encoding mdm2,
PT useful for treating e.g. cancer, psoriasis or restenosis by inhibiting
PT mdm2 expression.

XX Example 9; SEQ ID NO 187; 289pp; English.

XX The invention comprises antisense oligonucleotides which are targeted to
CC the human mdm2 gene. The antisense oligonucleotides of the invention are
CC useful for reducing hyperproliferation of human cells. The antisense
CC oligonucleotides are also useful for treating: hyperproliferative
CC disorders (e.g. cancer), psoriasis, fibrosis, atherosclerosis, or
CC restenosis. The antisense oligonucleotides are also useful for modulating

CC apoptosis, and for increasing expression of p21. The present DNA sequence
CC represents a human mdm2 gene antisense oligonucleotide of the invention.
CC The present sequence contains 2'-methoxyethoxy-residues and has a
CC phosphorothioate backbone.

XX Sequence 20 BP; 0 A; 4 C; 4 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 2e+02; Length 20;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2916 AAGGAACCCATGACAAAGA 2934

Db 19 AAGAAACCCCAAGACAAAGA 1

RESULT 163

ADE27785/c

ID ADE27785 standard; DNA; 20 BP.

XX ADE27785;

AC ADE27785;

XX 29-JAN-2004 (first entry)

XX Human B7-1 mRNA targeted oligonucleotide SEQ ID 47.
XX ss; human; B7-1; inflammatory skin disorder; antisense; psoriasis;
KW contact dermatitis; atopic dermatitis; seborrheic dermatitis;
KW nummular dermatitis; generalised exfoliative dermatitis; eczema;
KW critical costimulatory molecule.

XX Synthetic.

XX Homo sapiens.

XX US2003176374-A1.

XX 18-SEP-2003.

XX 09-MAY-2001; 2001US-00851871.

XX 31-DEC-1996; 96US-00777266.

PR 04-JUN-1999; 99US-00326186.

XX 25-MAY-2000; 2000WO-US014471.

XX (BENN/) BENNETT C F.

XX (VICK/) VICKERS T A.

XX (KARR/) KARRAS J G.

XX Bennett CF, Vickers TA, Karras JG;

XX WPI; 2003-863863/80.

XX Treating an inflammatory skin disorder such as psoriasis comprises

PT topically applying an antisense compound targeted to the nucleic acid

PT encoding human B7 protein.

XX Example 1; SEQ ID NO 47; 88pp; English.

XX The invention relates to a method of treating an inflammatory skin
CC disorder in an individual by topically applying an antisense compound
CC targeted to a nucleic acid molecule encoding a human B7 protein. The
CC invention is for treating an inflammatory skin disorder in individual.
CC The skin disorder is psoriasis, contact dermatitis, atopic dermatitis,
CC seborrheic dermatitis, nummular dermatitis, generalised exfoliative
CC dermatitis or eczema. The invention effectively modulates critical
CC costimulatory molecules such as the B7 protein. The present sequence
CC represents a human B7-1 targeted oligonucleotide.

XX Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;

Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3766 TGGCTGGGATCCCTCCCT 3784
 |||||
 Db 20 TGGCTGGGATCCCTCTCT 2
 |||||

RESULT 164

ABZ85958
 ID ABZ85958 standard; DNA; 20 BP.

XX
 AC ABZ85958;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS
 XX WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX
 WPI: 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Claim 15; SEQ ID NO 1200; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 20 BP; 5 A; 1 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2092 TAGTATCTGTTGTAGCACT 2110
 |||||
 Db 1 TAGTATCTGTTGGAGACT 19
 |||||

RESULT 165

ABZ90805
 ID ABZ90805 standard; DNA; 20 BP.

XX
 AC ABZ90805;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS
 XX WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX
 WPI: 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 6047; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 20 BP; 1 A; 6 C; 1 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3081 TGTTCACTTTTCCCTTTT 3099
Db 1 TGTTCACTTTTCCCTCTCT 19

RESULT 166
ABZ93212
ID ABZ93212 standard; DNA; 20 BP.
XX
AC ABZ93212;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPITG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 8454; 872pp; English.
XX
The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 12 A; 4 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2974 CAGAGAAAACAGAAAGAGA 2992
Db 2 CAGAGCAAACAGAAAAGA 20

RESULT 167
ABZ98920/c
ID ABZ98920 standard; DNA; 20 BP.
XX
AC ABZ98920;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human PDE4A oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 14162; 872pp; English.
XX
The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY
2508 CAGGTGGAGCTGTACCGCC 2526
DB
20 CCGCTGGAGCTGTACCGCC 2

RESULT 168
ABZ97844
ID ABZ97844 standard; DNA; 20 BP.

XX	ABZ97844;
XX	AC
DT	17-OCT-2003 (first entry)
DE	Human ectoxin oligonucleotide sequence.

Human; antiseize; lung dysfunction; nasal airway dysfunction;
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
antiseize gene therapy; respiratory; lung; adenosine sensitivity;
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
lung inflammation; respiratory disease; ds.

OS Homo sapiens.

AA
PN
WO200285308-A2.

XX
PD
31-OCT-2002.

23-APR-2002: 2002WO-US013135.

XX
PR 24-APR-2001: 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX
PI
XX
Nvce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D:

PI Miller S, Tang L, Shahabuddin S;
NYCE SW, Li I, Samarasayya A;

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubinunone.

XX
PS Disclosure; SEQ ID NO 13086; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published/pct_sequences

Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels

Qy 2707 GAGGCATTTCTTGCCAGC 2725
pb 1 GAGGCATTTCTTGTCACC 19

RESULT 169
ABZ83897/c
ID ABZ83897 standard: DNA: 20 BP.

XX	ABZ83897;
XX	AC
XX	
DT	14-MAY-2003 (first entry)
XX	
DE	Toxicologically relevant rat PCR primer #1056

Accession	Organism	Gene	Accession	Organism	Gene
AA			XX		
KW			XX		
XX			XX		
OS			XX		
OS			XX		
XX			XX		
PN			XX		

XX
PD 27-FEB-2003

16-AUG-2002: 2002WO-IIS026514-XX PF

XX
PR 16-AUG-2001. 2001US-0313080PXX
PA (PHAS-) PHASE-1 MOLECULAR TOXICOLOGY INC

XX
PI Neft RE, Dunn RT, Adkins K, Pickett GG, Kier LD, Schmeiser K,
PI Alen P;

XX
DR WPI: 2003-268322/26.

Determining a toxicological response to an agent, useful for screening of PT drugs, comprises comparing the expression profile of one or more human PT toxic response genes to a reference gene expression profile indicative of PT toxicity.

XX
PS
Claim 1: Page 322: 455pp: English.

The present invention describes a method (W1) for determining a toxicological response to an agent, which comprises comparing the expression profile of one or more human toxic response genes to a reference gene expression profile indicative of toxicity, and so determining the presence of a toxic response to the agent. Also described: (1) an array comprising one or more polynucleotides selected from the genes corresponding to the partial sequences given in ABZ82842 to ABZ84764, or their fragments of at least 20 nucleotides, or homologues; and (2) determining if a gene putatively identified to be a toxic response gene plays a role on a toxic response pathway by determining the expression profile of the gene after exposure of cells or a human subject to a known toxic pharmaceutical or industrial agent, comprising: (a) exposing cells to an agent or isolating cells from a human subject who was exposed to an agent; (b) obtaining the test gene expression profile for a putatively identified toxic response gene after exposure to a known toxic pharmaceutical or industrial agent; and (c) comparing the test profile to the expression profile of a gene with a similar function or comparing the test profile to the expression profile of that gene after exposure to other known toxic compounds. The methods are useful for predicting and determining toxicological responses on a cellular, organ or system level. The arrays comprising the human genes are useful for toxicological screening of drugs, pharmaceutical compounds and chemicals

Query Match 0.4% Score 15.8 DB 1: Length 20:

OV 2653 GATGCAATTGGCAGGAAGC 2671
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0
Best Local Similarity 89.5%; Pred. NO. 26-02;

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Db      19 GGTGCAATTGGCAGAGC 1
|||||
RESULT 170
ACF03393/c
ID ACF03393 standard; DNA; 20 BP.
XX AC ACF03393;
XX DT 11-SEP-2003 (first entry)
XX DE M. gallisepticum mgc3 gene BKR region mutagenic PCR primer SEQ:36.
XX KW DNA molecule; prokaryotic cell; eukaryotic cell; virucide; vaccine;
XX KW immunostimulant; viral infection; PCR primer; linker; ss.
XX OS Mycoplasma gallisepticum.
XX OS Synthetic.
XX PN EP1275716-A2.
XX PD 15-JAN-2003.
XX PF 11-JUL-2002; 2002EP-00254879.
XX PR 11-JUL-2001; 2001US-00901572.
XX PR 25-APR-2002; 2002US-00131591.
XX PA (JAPG ) ZEON CORP.
XX PI Okuda T, Saito S, Dorsey KM, Tazuzaki Y;
XX DR WPI; 2003-373746/36.
XX DT DNA molecule derived from a prokaryotic cell, useful for producing a
PT vaccine for treating viral infections comprises at least one modified DNA
PT regions encoding NXB so that no N-glycosylation occurs during expression.
XX Example 2; Page 49; 70pp; English.
XX The present invention describes a DNA molecule derived from a prokaryotic
CC cell, where at least one of the DNA regions encoding NXB (where N =
CC asparagine, X = any amino acid other than proline, and B = serine or
CC threonine) has been modified so that no N-glycosylation occurs during the
CC expression in a eukaryotic cell. Also described: (1) a fused DNA
CC molecule, where a DNA encoding a signal sequence has been ligated to the
CC N-terminal end of the modified DNA molecule as described above so that it
CC may be expressed as a fusion protein; (2) a recombinant virus integrated
CC with the DNA molecule or the fused DNA molecule described above; (3)
CC producing a modified or fusion protein by using the recombinant virus
CC described above, to express a protein encoded by the modified DNA
CC molecule or the fused DNA molecule in a eukaryotic cell; and (4) a
CC vaccine comprising the recombinant virus. The DNA molecule has virucide
CC and immunostimulant activities. The DNA molecule is useful for producing
CC a vaccine for treating viral infections. The present sequence is used in
CC the exemplification of the present invention
XX Sequence 20 BP; 9 A; 2 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      3702 TGTATTATTTTTCAGAAC 3720
|||||
Db      19 TGTATTATTTCTTCAGAAC 1
|||||
RESULT 171
ADJ81464/c
ID ADJ81464 standard; DNA; 20 BP.
XX

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AC ADJ81464;
XX 06-MAY-2004 (first entry)
XX Plant retroelement associated sequence #25.
XX ss; retroelement; detection; retrovirus; plant.
XX OS Synthetic.
XX PN WO2003050259-A2.
XX PD 19-JUN-2003.
XX PF 10-DEC-2002; 2002WO-US039397.
XX PR 10-DEC-2001; 2001US-0339060P.
XX PA (IOWA ) UNIV IOWA STATE RES FOUND INC.
XX PI Wright DA, Voytas DF;
XX DR WPI; 2003-532907/50.
XX New isolated nucleic acids related to retrovirus elements from
PT Arabidopsis thaliana, useful for detecting infections, such as those
PT caused by retroviruses.
XX Disclosure; SEQ ID NO 63; 81pp; English.
XX The invention relates to novel isolated retroelement comprising at least
CC 90% identity to a 14028 base pair sequence (S1), given in the
CC specification or to nucleotides 1-1747, 12220-13966, 1-385, 1-40, 1708-
CC 1747, 1893-3575, 3576-4556, 4602-6314, 6315-7625, 8745-10600, 8745-10673
CC or 8745-10728 of this sequence, or its complement. The nucleic acid may
CC be useful in detecting infections, such as those caused by retroviruses.
CC This sequence corresponds to a retroelement associated sequence.
XX Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      2465 CTTTCATTGCTCTGCAGAG 2483
|||||
Db      20 CATGATTGCTCTGCAGAG 2
|||||
RESULT 172
ABD27035
ID ABD27035 standard; DNA; 20 BP.
XX ABD27035;
XX 29-JUL-2004 (first entry)
XX H93087-derived oligonucleotide SEQ ID 6047.
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX Homo sapiens.
XX WO200285309-A2.
XX 31-OCT-2002.

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XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX Claim 15; SEQ ID NO 6047; 763pp; English.
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 1 A; 6 C; 1 G; 12 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3081 TGTTCACATTTTCCCTTTT 3099
 DB 1 TGTTCACATTTTCCCTCT 19
 RESULT 173
 ABD31951/c
 ID ABD31951 standard; DNA; 20 BP.
 AC ABD31951;
 XX 29-JUL-2004 (first entry)
 XX Human PDE4A-derived oligonucleotide SEQ ID 14162.
 DE Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW

KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX Homo sapiens.
 OS WO200285309-A2.
 PN 31-OCT-2002.
 PD 23-APR-2002; 2002WO-US013143.
 PF 24-APR-2001; 2001US-0286036P.
 PR (EPIG-) EPIGENESIS PHARM INC.
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX Claim 15; SEQ ID NO 14162; 763pp; English.
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2508 CAGCTGAGCTGTACGCC 2526
 DB 20 CCGCTGAGCTGTACGCC 2

RESULT 174
ABD22188
ID ABD22188 standard; DNA; 20 BP.
XX
AC ABD22188;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human stannocalcin-derived oligo SEQ ID 1200.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
FN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPITG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 1200; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC of thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

XX
SQ Sequence 20 BP; 5 A; 1 C; 7 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02; 0; Mismatches 0; Gaps 0;
Matches 17; Conservative 0;
OY 2092 TAGTATCTGTTGTAGCAGT 2110
|||||
DB 1 TAGTATCTGTTGGAGAGT 19
|||||
RESULT 175
ABD30875
ID ABD30875 standard; DNA; 20 BP.
XX
AC ABD30875;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human eotaxin-derived oligonucleotide SEQ ID 13086.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
FN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPITG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 13086; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC of thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02; 2; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2707 GAGGCATTCTTGTCCAGC 2725
 DB 1 GAGGCATTCTTGTCCACC 19
 RESULT 176
 ABD29442
 ID ABD29442 standard; DNA; 20 BP.
 XX
 AC ABD29442;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE H87536-derived oligonucleotide SEQ ID 8454.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 8454; 763bp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 12 A; 4 C; 4 G; 0 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02; 2; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2974 CAGAGAAAACAGAAAGAGA 2992
 DB 2 CAGAGCAACAGAAAGAGA 20
 RESULT 177
 ADH70402
 ID ADH70402 standard; DNA; 20 BP.
 XX
 AC ADH70402;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human Vbeta gene repeat sequence #192.
 XX
 KW human; T-cell associated disease; Vbeta; autoimmune disease;
 KW degenerative nervous system disease; graft versus host disease;
 KW hypersensitivity disease; infectious disease; neoplastic disease;
 KW Addison's disease; atrophic gastritis;
 KW degenerative nervous system disease; multiple sclerosis;
 KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
 KW allergy; type II hypersensitivity; Goodpasture's syndrome;
 KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
 KW HIV; fungal infection; Candida; parasitic infection; schistosoma;
 KW filaria; bacterial infection; Mycobacterium; neoplastic disease;
 KW lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;
 KW breast cancer; ds.
 XX
 OS Homo sapiens.
 XX
 PN US2002150891-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 05-MAR-1999; 99US-00263959.
 XX
 PR 19-SEP-1994; 94US-00309335.
 PR 19-SEP-1995; 95US-00531241.
 XX
 PA (HOOD/) HOOD L E.
 PA (ROWE/) ROWEN L.
 XX

PI Hood LE, Rowen LJ;
 XX WPI; 2004-059052/06.
 XX
 PT Kit for diagnosing and treating T-cell associated diseases e.g.
 PT autoimmune, degenerative nervous system and infectious disease, comprises
 PT nucleic acid primers specifically priming and allowing amplification of a
 PT Vbeta gene.
 XX
 PS Disclosure; SEQ ID NO 596; 164pp; English.
 XX
 CC The invention relates to a kit for diagnosing and treating T-cell
 CC associated diseases which comprises a panel of nucleic acid primers
 CC specifically priming and allowing amplification of each Vbeta gene,
 CC VbetaRNA or cDNA. The kit is useful for diagnosing organ transplant
 CC rejection and diagnosing and treating T-cell associated diseases
 CC including autoimmune diseases, degenerative nervous system diseases,
 CC graft versus host disease, hypersensitivity diseases, infectious diseases
 CC and neoplastic diseases. Autoimmune diseases include Addison's disease,
 CC atrophic gastritis. Degenerative nervous system diseases include multiple
 CC sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
 CC I hypersensitivities such as contact with allergens that lead to
 CC allergies, Type II hypersensitivities such as those present in
 CC Goodpasture's syndrome and Type IV hypersensitivities such as those
 CC manifested in leprosy. Infectious diseases include viral infections
 CC caused by viruses such as HIV, fungal infections such as those caused by
 CC the yeast genus Candida, parasitic infections such as those caused by
 CC schistosomes, filaria and bacterial infections such as those caused by
 CC Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
 CC such as leukaemias, lymphomas and cancers such as cancer of the brain,
 CC breast. The present sequence represents a Vbeta gene repeat sequence.
 XX
 SQ Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3300 ATATATTTTATTTTATA 3318
 Db 2 ATATATTTTATTTTATA 20
 ||||| ||||| ||||| |||||
 RESULT 178
 ADH67733/c
 ID ADH67733 standard; DNA; 20 BP.
 XX
 AC ADH67733;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human glucocorticoid receptor-specific antisense oligonucleotide #4567.
 XX
 KW antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX
 OS Homo sapiens.
 XX
 PN WO2003099215-A2.
 XX
 PD 04-DEC-2003.
 XX
 PF 20-MAY-2003; 2003WO-US016084.
 XX
 PR 20-MAY-2002; 2002US-0381857P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI Crosby SD, Nalseth AE;
 XX
 DR WPI; 2004-035034/03.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 Claim 4; SEQ ID NO 596; 164pp; English.
 The invention comprises an antisense oligonucleotides that are targeted
 to nucleic acids encoding a mammalian glucocorticoid receptor. The
 antisense oligonucleotides of the invention are useful for preventing or
 delaying infection, inflammation or tumour formation. The antisense
 oligonucleotides are also useful for treating diabetes, obesity,
 cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 present DNA sequence represents an antisense oligonucleotide that targets
 the human glucocorticoid receptor gene. NOTE: The present sequence
 contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
 Sequence 20 BP; 12 A; 1 C; 0 G; 12 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3298 TCATATATTTTATTTTATA 3316
 Db 20 TAATATATTTTATTTTATA 2
 ||||| ||||| ||||| |||||
 RESULT 179
 ADH65935
 ID ADH65935 standard; DNA; 20 BP.
 XX
 AC ADH65935;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human glucocorticoid receptor-specific antisense oligonucleotide #2769.
 XX
 KW antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX
 OS Homo sapiens.
 XX
 PN WO2003099215-A2.
 XX
 PD 04-DEC-2003.
 XX
 PF 20-MAY-2003; 2003WO-US016084.
 XX
 PR 20-MAY-2002; 2002US-0381857P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI Crosby SD, Nalseth AE;
 XX
 DR WPI; 2004-035034/03.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 Claim 4; SEQ ID NO 2769; 985pp; English.
 The invention comprises an antisense oligonucleotides that are targeted
 to nucleic acids encoding a mammalian glucocorticoid receptor. The
 antisense oligonucleotides of the invention are useful for preventing or
 delaying infection, inflammation or tumour formation. The antisense
 oligonucleotides are also useful for treating diabetes, obesity,
 cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 present DNA sequence represents an antisense oligonucleotide that targets
 the human glucocorticoid receptor gene. NOTE: The present sequence

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 Claim 4; SEQ ID NO 4567; 985pp; English.
 The invention comprises an antisense oligonucleotides that are targeted
 to nucleic acids encoding a mammalian glucocorticoid receptor. The
 antisense oligonucleotides of the invention are useful for preventing or
 delaying infection, inflammation or tumour formation. The antisense
 oligonucleotides are also useful for treating diabetes, obesity,
 cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 present DNA sequence represents an antisense oligonucleotide that targets
 the human glucocorticoid receptor gene. NOTE: The present sequence
 contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
 Sequence 20 BP; 12 A; 1 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3298 TCATATATTTTATTTTATA 3316
 Db 20 TAATATATTTTATTTTATA 2
 ||||| ||||| ||||| |||||
 RESULT 179
 ADH65935
 ID ADH65935 standard; DNA; 20 BP.
 XX
 AC ADH65935;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human glucocorticoid receptor-specific antisense oligonucleotide #2769.
 XX
 KW antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX
 OS Homo sapiens.
 XX
 PN WO2003099215-A2.
 XX
 PD 04-DEC-2003.
 XX
 PF 20-MAY-2003; 2003WO-US016084.
 XX
 PR 20-MAY-2002; 2002US-0381857P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI Crosby SD, Nalseth AE;
 XX
 DR WPI; 2004-035034/03.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 Claim 4; SEQ ID NO 2769; 985pp; English.
 The invention comprises an antisense oligonucleotides that are targeted
 to nucleic acids encoding a mammalian glucocorticoid receptor. The
 antisense oligonucleotides of the invention are useful for preventing or
 delaying infection, inflammation or tumour formation. The antisense
 oligonucleotides are also useful for treating diabetes, obesity,
 cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 present DNA sequence represents an antisense oligonucleotide that targets
 the human glucocorticoid receptor gene. NOTE: The present sequence

CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
 XX Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
 SQ

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1325 CAAGGTGCTGCTTCTCAA 1343
 |||||
 Db 1 CAAATGTTGCTGTTCTGAA 19

RESULT 180
 ADH67703/C
 ID ADH67703 standard; DNA; 20 BP.
 XX
 AC ADH67703;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human glucocorticoid receptor-specific antisense oligonucleotide #4537.
 XX
 KW antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX
 OS Homo sapiens.

XX
 XX WO2003099215-A2.
 PN
 XX
 PD 04-DEC-2003.
 XX
 XX 20-MAY-2003; 2003WO-US016084.
 PF
 XX
 XX 20-MAY-2002; 2002US-0381857P.
 PR
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 XX Crosby SD, Nalseth AE;
 PI
 XX WPI; 2004-035034/03.
 DR

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 PS Claim 4; SEQ ID NO 4537; 985pp; English.
 XX
 CC The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity.
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: the present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
 XX
 SQ Sequence 20 BP; 13 A; 0 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 3297 CTGATATATTTTATTTT 3315
 |||||
 Db 19 CTATATATTTTATTTT 1

RESULT 181
 ADI79725/C
 ID ADI79725 standard; DNA; 20 BP.
 XX
 AC ADI79725;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 51.
 XX
 KW HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
 KW HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaeamic;

ID ADI79725 standard; DNA; 20 BP.
 XX
 AC ADI79725;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 248.
 XX
 KW HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
 KW HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaeamic;
 KW antisense gene therapy; cardiovascular disorder; cholesterol metabolism;
 KW human; ss.

XX Homo sapiens.
 OS
 XX US2004006031-A1.
 PN
 XX 08-JAN-2004.
 PD
 XX 02-JUL-2002; 2002US-00190366.
 PF
 XX 02-JUL-2002; 2002US-00190366.
 PR
 XX (ISIS-) ISIS PHARM INC.

XX Dean NM, Freier SM, Dobie KW;
 PI
 XX WPI; 2004-081743/08.
 DR
 XX New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding HMG-CoA reductase, useful for treating
 PT atherosclerosis, or a disease involving cholesterol metabolism or
 PT angiogenesis.
 PS Example 16; SEQ ID NO 248; 110pp; English.
 XX

XX The invention relates to novel compounds of 8-80 nucleobases in length
 CC targeted to, and which specifically hybridises with, a nucleic acid
 CC molecule encoding 3-hydroxy-3-methylglutaryl-Coenzyme A (HMG-CoA)
 CC reductase, and inhibits the expression of HMG-CoA reductase. The novel
 CC compounds have cardiant, antiarteriosclerotic, and antilipaeamic
 CC activities. The compound can be used to treat disorders by antisense gene
 CC therapy. The compounds, compositions and methods are useful for treating
 CC a disease or condition associated with HMG-CoA reductase, such as a
 CC cardiovascular disorder e.g. atherosclerosis, or a disease or condition
 CC involving cholesterol metabolism. They are also useful in research and
 CC diagnostics for modulating the expression of HMG-CoA reductase. This
 CC polynucleotide sequence represents an antisense oligonucleotide of the
 CC invention.

XX Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 73 CTCGTATCCCGCCATGGC 91
 |||||
 Db 19 CTATGCTCCCGCCATGGC 1

RESULT 182
 ADI79528
 ID ADI79528 standard; DNA; 20 BP.
 XX
 AC ADI79528;
 XX
 DT 22-APR-2004 (first entry)
 XX
 DE Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 51.
 XX
 KW HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
 KW HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaeamic;

KW antisense gene therapy; cardiovascular disorder; cholesterol metabolism;
 KW human; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2004006031-A1.
 XX
 PD 08-JAN-2004.
 XX
 PF 02-JUL-2002; 2002US-00190366.
 XX
 PR 02-JUL-2002; 2002US-00190366.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Dean NM, Freier SM, Dobie KW;
 XX
 DR WPI; 2004-081743/08.
 XX
 PT New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding HMG-CoA reductase, useful for treating
 PT atherosclerosis, or a disease involving cholesterol metabolism or
 PT angiogenesis.
 XX
 PS Example 15; SEQ ID NO 51; 110pp; English.
 XX
 CC The invention relates to novel compounds of 8-80 nucleobases in length
 CC targeted to, and which specifically hybridises with, a nucleic acid
 CC molecule encoding 3-hydroxy-3-methylglutaryl-Coenzyme A (HMG-CoA)
 CC reductase, and inhibits the expression of HMG-CoA reductase. The novel
 CC compounds have cardiant, antiarteriosclerotic, and antilipaeamic
 CC activities. The compound can be used to treat disorders by antisense gene
 CC therapy. The compounds, compositions and methods are useful for treating
 CC a disease or condition associated with HMG-CoA reductase, such as a
 CC cardiovascular disorder e.g. atherosclerosis, or a disease or condition
 CC involving cholesterol metabolism. They are also useful in research and
 CC diagnostics for modulating the expression of HMG-CoA reductase. This
 CC polynucleotide sequence represents an antisense oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02; 2; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 2;
 QY 73 CTCGATCCAGCCATGGC 91
 DB 2 CTATGCTCCAGCCATGGC 20
 RESULT 183
 ID ADJ60803/c
 AC ADJ60803 standard; DNA; 20 BP.
 XX
 AC ADJ60803;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Oligonucleotide associated to PDE4A #86.
 XX
 KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW airway inflammation; allergy; asthma; impeded respiration;
 KW cystic fibrosis; acute respiratory distress syndrome;
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 KW ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2004011613-A2.
 XX
 PD 05-FEB-2004.
 XX
 PF 02-JUL-2002; 2002US-0399076P.
 XX
 PR 29-JUL-2002; 2002US-0399076P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.

PF 25-JUL-2003; 2003WO-US0233509.
 XX
 PR 29-JUL-2002; 2002US-0399076P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Tang L, Sandraaagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H,
 XX
 DR WPI; 2004-203534/19.
 XX
 PT Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codons and introns of respiratory disease-relevant genes e.g.,
 PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
 PT disease e.g., asthma.
 XX
 PS Claim 2; SEQ ID NO 1659; 85pp; English.
 XX
 CC The present invention relates to an oligonucleotide anti-sense to e.g.,
 CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02; 2; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 2;
 QY 2508 CAGGTGGAGCTGTACCGCC 2526
 DB 20 CCGCTGGAGCTGTACCGCC 2
 RESULT 184
 ID ADJ59719
 AC ADJ59719;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Oligonucleotide associated to Eotaxin U46572 #5.
 XX
 KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW airway inflammation; allergy; asthma; impeded respiration;
 KW cystic fibrosis; acute respiratory distress syndrome;
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 KW ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2004011613-A2.
 XX
 PD 05-FEB-2004.
 XX
 PF 25-JUL-2003; 2003WO-US0233509.
 XX
 PR 29-JUL-2002; 2002US-0399076P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX NYCE JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX WPI; 2004-203534/19.
 DR Novel single or multiple target oligonucleotide anti-sense to e.g.
 XX initiation codons and introns of respiratory disease-relevant genes e.g.,
 PT CCRI, RANTES, MCP4, useful for prophylaxis or treating respiratory
 PT disease e.g., asthma.
 XX Claim 2; SEQ ID NO 575; 85pp; English.
 PS The present invention relates to an oligonucleotide anti-sense to e.g.,
 XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.
 XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 2707 GAGGCATTCTTGTCCACC 2725
 DB 1 GAGGCATTCTTGTCCACC 19
 RESULT 185
 ADJ54227/c
 ID ADJ54227 standard; DNA; 20 BP.
 XX AC ADJ54227;
 XX 06-MAY-2004 (first entry)
 XX Human B7-1 DNA antisense oligonucleotide #25.
 XX Airway hyperresponsiveness; pulmonary inflammation;
 KW antisense oligonucleotide; human; B7 protein; B7-1; asthma;
 KW antiasthmatic; antiinflammatory; ss.
 XX Homo sapiens.
 OS US2004023917-A1.
 FN 05-FEB-2004.
 XX 23-MAY-2003; 2003US-00444206.
 XX 31-DEC-1996; 96US-00777266.
 PR 04-JUN-1999; 99US-00326186.
 PR 25-MAY-2000; 2000WO-US014471.
 PR 09-MAY-2001; 2001US-00851871.
 XX (BENN/) BENNETT C F.
 PA (VICK/) VICKERS T A.
 PA (KARR/) KARRAS J G.
 XX Bennett CF, Vickers TA, Karras JG;

XX WPI; 2004-132608/13.
 XX Treating airway hyperresponsiveness or pulmonary inflammation comprises
 PT administering an antisense compound targeted to a nucleic acid molecule
 PT encoding a human B7 protein to the individual.
 XX Example 1; SEQ ID NO 47; 182pp; English.
 PS The invention relates to a method for treating airway hyperresponsiveness
 CC or pulmonary inflammation in an individual comprising administering an
 CC antisense compound targeted to a nucleic acid molecule encoding a human
 CC B7 protein. The invention also relates to a method of inhibiting
 CC expression of a nucleic acid molecule encoding B7-1 or B7-2. The
 CC antisense compound is an antisense oligonucleotide which has a modified
 CC sugar moiety and nucleobase. The human B7 protein is human B7-1 or B7-2
 CC protein or both. The compound is useful for treating airway
 CC hyperresponsiveness or pulmonary inflammation, which is associated with
 CC asthma, by inhibiting expression of human B7 protein. This sequence
 CC represents an antisense oligonucleotide of the invention.
 XX Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
 SQ Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 3766 TGGCTGGCATCCCTCCCT 3784
 DB 20 TGGCTGGCATCCCTCCCT 2
 RESULT 186
 ADL23352/c
 ID ADL23352 standard; DNA; 20 BP.
 XX AC ADL23352;
 XX 20-MAY-2004 (first entry)
 XX Primer #2 for identification of HPV 45.
 XX ss; primer; diagnosis; cervical intraepithelial neoplasia; CIN;
 KW allelic deletion; FHIT; fragile histidine triad gene; PR;
 KW progesterone receptor; DLEC1; deleted in lung and oesophageal cancer 1;
 KW TRIM29; tripartite motif-containing 29; microsatellite; D3S1300; D3S1260;
 KW D11S35; D11S528.
 XX Homo sapiens.
 OS Synthetic.
 XX WO2004018711-A2.
 XX 04-MAR-2004.
 XX 20-AUG-2003; 2003WO-GB003637.
 XX 24-AUG-2002; 2002GB-00019890.
 PR 26-AUG-2002; 2002US-0405717P.
 XX (UNLO) UNIV COLLEGE LONDON.
 XX Ming-Qing D;
 XX WPI; 2004-226867/21.
 XX Diagnosing cervical intraepithelial neoplasia comprising detecting an
 PT allelic deletion in genes selected from FHIT, PR, DLEC1- or TRIM 29 by
 PT comparing the FHIT, PR, DLEC1 and/or TRIM 29 polynucleotides or proteins
 PT present in the samples.
 XX Disclosure; SEQ ID NO 34; 56pp; English.

CC This sequence represents a primer which was used in the method of the
 CC invention for diagnosing susceptibility to persistence or progression of
 CC cervical intraepithelial neoplasia (CIN) in an individual suffering from
 CC the disease. The method comprises detecting an allelic deletion in one or
 CC more genes selected from FHIT (fragile histidine triad gene), PR
 CC (progesterone receptor), DLEC1 (deleted in lung and oesophageal cancer 1)
 CC or TRIM29 (tripartite motif-containing 29) by comparing the FHIT, PR,
 CC DLEC1 and/or TRIM29 polynucleotides or proteins present in the samples
 CC derived from non-dyskaryotic and dyskaryotic samples, respectively. The
 CC method is carried out using a kit comprising a panel of two or more pairs
 CC of primers, where each pair of primers is suitable for amplifying a
 CC microsatellite DNA marker selected from D3S1300, D3S1260, D11S35 or
 CC D11S28, or a panel of two or more specific binding agents, where each
 CC binding agent is capable of distinguishing between the normal and allelic
 CC deletion forms of a polynucleotide or protein selected from FHIT, PR,
 CC TRIM29 or DLEC1. The method is useful for diagnosing susceptibility to
 CC persistence or progression of cervical intraepithelial neoplasia in an
 CC individual suffering from the disease.

XX Sequence 20 BP; 1 A; 4 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1995 ACACCTTCAGATAAGCAGG 2013
 ||||| ||||| ||||| |||||
 Db 20 ACACCTCCAGAAAGCAGG 2

RESULT 187
 ADL27792/c
 ID ADL27792 standard; DNA; 20 BP.
 XX
 AC ADL27792;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Human Fas cDNA, antisense oligonucleotide #72.
 XX
 KW Antisense therapy; human; Fas; Fas ligand; FasL; Apo-1L; CD95L;
 KW Fas associated protein 1; Fap-1; signal transduction; autoimmune disease;
 KW inflammatory disease; cancer; immunosuppressive; antiinflammatory;
 KW cytostatic; phosphorothioate; ss.

XX Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide has a phosphorothioate
 FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5'
 FT and 3' ends, which are 5 nucleotides in length at each
 FT end. All cytidine residues are 5-methylcytidines"

XX US6653133-B1.
 PN
 XX 25-NOV-2003.
 PD
 XX 18-SEP-2000; 2000US-00665615.
 PF
 XX 12-APR-1999; 99US-00290640.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Dean NM, Marcussen EG, Wyatt J;
 PI
 XX WPI; 2004-050524/05.
 DR

XX New antisense oligonucleotides of 20-50 nucleobases, useful for treating
 PT autoimmune or inflammatory diseases, and cancer.
 PT
 XX

Example 18; SEQ ID NO 153; 76pp; English.

PS The present invention relates to antisense compounds targeted to nucleic
 XX acids encoding human Fas (also known as Apo-1 or CD95), Fas ligand (FasL,
 CC also Apo-1L and CD95L), and Fas associated protein 1 (Fap-1). The
 CC antisense compound comprises an antisense oligonucleotide that
 CC specifically hybridises with one of the said nucleic acids and inhibits
 CC Fas, FasL or Fap-1 mediated signal transduction. The antisense
 CC oligonucleotide is a chimeric oligonucleotide. The antisense
 CC oligonucleotide comprises at least one modified internucleoside linkage,
 CC preferably a phosphorothioate linkage. It also comprises at least one
 CC modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE) sugar
 CC moiety. The antisense oligonucleotide further comprises at least one
 CC modified nucleobase, preferably a 5-methylcytosine. The antisense
 CC oligonucleotides are useful for the treatment of autoimmune or
 CC inflammatory diseases, and cancers associated with overexpression of or
 CC constitutive activation of Fas, FasL, or Fap-1. The present sequence
 CC represents an antisense oligonucleotide used in the examples of the
 CC present invention.

XX Sequence 20 BP; 9 A; 1 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 861 TTAGAATAATTTTGATA 879
 ||||| ||||| ||||| |||||
 Db 20 TTAAGAAATATATTTTATA 2

RESULT 188
 ADM53564/c
 ID ADM53564 standard; DNA; 20 BP.
 XX
 AC ADM53564;
 XX
 DT 03-JUN-2004 (first entry)
 XX
 DE Human Fas antisense oligonucleotide seqid 153.
 XX
 KW immunosuppressive; antiinflammatory; hepatotropic; virucide; cytostatic;
 KW antisense technology; Fas; Fas ligand; Fap-1; Fas associated disorder;
 KW Fap-1 associated disorder; ischaemia reperfusion injury; apoptosis;
 KW allograft; autoimmune disease; inflammatory disease; hepatitis; cancer;
 KW lymphoma; human; antisense oligonucleotide; ss.

XX Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= Phosphorothioate backbone. All cytidines
 FT are 5-methylcytidines"

FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 15..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"

XX US2004033979-A1.
 PN
 XX 19-FEB-2004.
 PD
 XX 14-JUL-2003; 2003US-00619220.
 PF
 XX 12-APR-1999; 99US-00290640.
 PR 18-SEP-2000; 2000US-00665615.
 PR 09-MAR-2001; 2001US-00802669.
 PR

XX (DEAN/) DEAN N M.
 PA (MARC/) MARCUSSEN E G.
 PA (WYAT/) WYATT J.
 PA (ZHAN/) ZHANG H.
 XX
 PI Dean NM, Marcussen EG, Wyatt J, Zhang H;
 XX WPI; 2004-180091/17.
 DR
 XX
 PT New antisense compound targeted to nucleic acid molecule encoding Fas or
 PT Fap-1, useful in diagnosing, treating or preventing autoimmune or
 PT inflammatory disease, cancer, apoptosis, allograft rejection or ischemia
 PT reperfusion injury.
 XX
 XX Example 18; SEQ ID NO 153; 83pp; English.
 PS
 XX The invention describes an antisense compound 8-30 or 8-50 nucleobases in
 CC length targeted to the 5'-untranslated region, translational start site,
 CC translational termination region or 3'-untranslated region of a nucleic
 CC acid molecule encoding Fas, Fas ligand or Fap-1. Also described are: a
 CC pharmaceutical composition comprising the anti-sense compound and a
 CC pharmaceutical carrier or diluent; a method of inhibiting the expression
 CC of Fas or Fap-1 in cells or tissues; treating an animal having a disease
 CC or condition associated with Fas or Fap-1; and preventing allograft
 CC rejection, ischemia reperfusion injury or apoptosis in an allograft
 CC recipient. The antisense compound and pharmaceutical composition is
 CC useful in diagnosing, treating or preventing autoimmune or inflammatory
 CC disease, e.g. hepatitis, cancer, e.g. cancer of the colon, liver, lung or
 CC a lymphoma, apoptosis, allograft rejection, e.g. cardiac, renal, hepatic
 CC or skin allograft and ischemia reperfusion injury. This sequence
 CC represents a human Fas antisense oligonucleotide.
 XX
 SQ Sequence 20 BP; 9 A; 1 C; 0 G; 10 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 861 TTAAGAAATATTTTGATA 879
 DB 20 TTAAGAAATATTTTGATA 2
 RESULT 189
 ADO45209
 ID ADO45209 standard; DNA; 20 BP.
 XX
 AC ADO45209;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Human oligonucleotide #575.
 XX
 KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
 KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
 KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
 KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
 KW asthma; lung allergy; inflammation; inflammatory disease;
 KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
 KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
 KW acute respiratory distress syndrome; pulmonary hypertension;
 KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
 XX
 OS Homo sapiens.
 XX
 PN US2004049022-A1.
 XX
 PD 11-MAR-2004.
 XX
 PF 25-JUL-2003; 2003US-00627930.
 XX
 XX 23-APR-2002; 2002WO-US013135.

PR 23-APR-2002; 2002WO-US013143.
 XX
 PA (NYCE/) NYCE J W.
 PA (SAND/) SANDRASAGRA A.
 PA (TANG/) TANG L.
 PA (AGUI/) AGUILAR D.
 PA (MILL/) MILLER S.
 PA (SHAH/) SHAHABUDDIN S.
 PA (LUHH/) LU H.
 PA (CONG/) CONG H.
 XX
 XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 PI WPI; 2004-293804/27.
 DR
 XX
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codon, intron of respiratory disease-relevant gene e.g. CCRI,
 PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
 PT asthma.
 XX
 PS Claim 2; SEQ ID NO 575; 174pp; English.
 XX
 CC The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
 CC -5 receptor, CCRI, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
 CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 20;
 Best Local Similarity 89.5%; Pred. No. 2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2707 GAGGCATTTTGTGCCAGC 2725
 DB 1 GAGGCATTTTGTGCCACC 19
 RESULT 190
 ADO46292/c
 ID ADO46292 standard; DNA; 20 BP.
 XX
 AC ADO46292;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Human oligonucleotide #1658.
 XX
 KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
 KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
 KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
 KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;

KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US0131135.
PR 23-APR-2002; 2002WO-US0131143.
XX
XX (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHAUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-293804/27.
DR
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCRI,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
PS Claim 2; SEQ ID NO 1659; 174pp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2508 CAGGTGGAGCTGTACGCC 2526
DB 20 CCGCTGGAGCTGTACGCC 2

RESULT 191
ADO51802
ID ADO51802 standard; DNA; 20 BP.
XX
AC ADO51802;
XX
XX 12-AUG-2004 (first entry)
XX
XX Human ADAM15 target oligonucleotide #26.
DE
XX
KW ADAM15; metagirdin; MDC15; a disintegrin and metalloproteinase domain 15;
KW diagnosis; inflammation; therapy; human; ss.
XX
OS Homo sapiens.
XX
PN US2004102392-A1.
XX
XX 27-MAY-2004.
XX
XX 21-NOV-2002; 2002US-00302028.
PF
XX 21-NOV-2002; 2002US-00302028.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX
PI Bennett CF, Dean NM, Dobie KW;
XX
XX WPI; 2004-399722/37.
DR
XX
XX New compound targeted to a nucleic acid molecule encoding ADAM15 and
PT inhibits the expression of ADAM15, useful for modulating the expression
PT of ADAM15 or for diagnosing or treating, e.g. inflammation.
XX
XX Example 15; SEQ ID NO 73; 38pp; English.
PS
XX
XX The present invention is directed to antisense oligonucleotides targeted
CC to ADAM15 (otherwise known as metagirdin, MDC15, and a disintegrin and
CC metalloproteinase domain 15) and which modulate the expression of ADAM15.
CC The invention is useful for diagnosing and treating diseases associated
CC with expression of ADAM15 such as inflammation. The present sequence is
CC human ADAM15 target oligonucleotide. This sequence is used in the
CC exemplification of the invention.
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2601 AAAGCCCTGCTGGATGTA 2619
DB 2 AAAGCCCTGCTGGATGGAA 20

RESULT 192
ADO51767/c
ID ADO51767 standard; DNA; 20 BP.
XX
AC ADO51767;
XX
XX 12-AUG-2004 (first entry)
XX
XX
DE Human ADAM15 antisense oligonucleotide ISIS #173654.
XX
KW ADAM15; metagirdin; MDC15; a disintegrin and metalloproteinase domain 15;
KW diagnosis; inflammation; therapy; human; antisense;
KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH

FT	modified_base	1..20	
FT	FT	/*tag= b	
FT	FT	/mod_base= OTHER	
FT	FT	/note= "Phosphorothioate backbone where all cytidines are	
FT	FT	5-methyl cytidines"	
FT	modified_base	1..5	
FT	FT	/*tag= a	
FT	FT	/mod_base= OTHER	
FT	FT	/note= "2', -methoxyethyl (2' -MOE) nucleotides"	
FT	modified_base	16..20	
FT	FT	/*tag= c	
FT	FT	/mod_base= OTHER	
FT	FT	/note= "2', -methoxyethyl (2' -MOE) nucleotides"	
XX	US2004102392-A1.		
XX	PN		
XX	XX		
XX	PD	27-MAY-2004.	
XX	XX		
XX	PP	21-NOV-2002; 2002US-00302028.	
XX	XX		
XX	PR	21-NOV-2002; 2002US-00302028.	
XX	XX		
XX	PA	(ISIS-) ISIS PHARM INC.	
XX	XX		
XX	PI	Bennett CF, Dean NM, Dobie KW;	
XX	XX		
XX	DR	WPI; 2004-399722/37.	
XX	XX		
XX	PT	New compound targeted to a nucleic acid molecule encoding ADAM15 and	
XX	PT	inhibits the expression of ADAM15, useful for modulating the expression	
XX	PT	of ADAM15 or for diagnosing or treating, e.g. inflammation.	
XX	XX		
XX	PS	Example 15; SEQ ID NO 38; 38pp; English.	
XX	XX		
XX	CC	The present invention is directed to antisense oligonucleotides targeted	
XX	CC	to ADAM15 (otherwise known as metagirdin, MDC15, and a disintegrin and	
XX	CC	metalloproteinase domain 15) and which modulate the expression of ADAM15.	
XX	CC	The invention is useful for diagnosing and treating diseases associated	
XX	CC	with expression of ADAM15 such as inflammation. The present sequence is	
XX	CC	human ADAM15 antisense oligonucleotide. This sequence is used in the	
XX	CC	exemplification of the invention.	
XX	XX		
SQ	Sequence	20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;	
	Query Match	0.4%; Score 15.8; DB 1; Length 20;	
	Best Local Similarity	89.5%; Pred. No. 2e+02;	
	Matches	17; Conservative 0; Mismatches 2; Indels 0; Gaps 0	
Qy	2601	AAAGCCCTCTGGATGGTA 2619	
Db	19	AAAGCCCTCTGGATGGAA 1	
RESULT 193			
ADN30059/c			
ID	ADN30059	standard; DNA; 20 BP.	
XX	XX		
AC	ADN30059;		
XX	XX		
DT	12-AUG-2004	(first entry)	
XX	XX		
DE	DE		
XX	XX	Human cytokine-inducible kinase antisense oligonucleotide #30.	
KW	KW	cytostatic; antisense therapy; cytokine-inducible kinase;	
KW	KW	cytokine-inducible kinase inhibitor; antisense technology;	
KW	KW	cytokine-inducible kinase expression; hyperproliferative disorder; human;	
KW	KW	antisense oligonucleotide; ss.	
OS	OS	Homo sapiens.	
FH	FH	Key	Location/Qualifiers
FT	modified_base	1..20	
FT	FT	/*tag= b	

```

ADP11285
ID ADP11285 standard; DNA; 20 BP.
XX
AC ADP11285;
XX
DT 12-AUG-2004 (first entry)
XX
DE Set 1 right PCR primer for marker probe #299.
XX
KW transplant rejection; immune system; rheumatoid arthritis; lupus;
KW inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX
OS Homo sapiens.
XX
PN WO2004042346-A2.
XX
PD 21-MAY-2004.
XX
PF 24-APR-2003; 2003WO-US012946.
XX
PR 24-APR-2002; 2002US-00131831.
PR 20-DEC-2002; 2002US-00325899.
XX
PA (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
PI Wohlgemuth J, Fry K, Woodward R, Ly N, Prentice J, Morris M;
PI Rosenberg S;
XX
XX
DR WPI; 2004-400724/37.
XX
PT Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
PT pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
PT rejection, in an individual, comprises detecting the expression level of
PT the genes.
XX
PS Claim 58; SEQ ID NO 1294; 1762pp; English.
XX
CC The present invention relates to diagnosing or monitoring transplant
CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC comprises detecting the expression level of one or more genes. The
CC methods, system and kits are useful in diagnosing or monitoring
CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC islet, lung, bone marrow or stem cell transplant rejection, in an
CC xenotransplant rejection or mechanical organ replacement rejection, in an
CC individual. The method is also useful in assessing the immune status of
CC an individual. The methods are also useful in diagnosing and monitoring
CC diseases that involve the immune system, e.g. rheumatoid arthritis,
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC viral, bacterial or fungal infection. The present sequence represents a
CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
CC of allograft rejection and other disorders.
XX
SQ Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2008 AGCAGGGCATGCTGTGCT 2026
DB 1 AGCAGGAAATGCTGTGCT 19

RESULT 195
ADQ88907
ID ADQ88907 standard; DNA; 20 BP.
XX
AC ADQ88907;
XX
XX
DT 23-SEP-2004 (first entry)
XX
DE Breast cancer associated polymorphism detection primer #5.
XX
KW cytostatic; gene therapy; breast cancer; polymorphism detection; PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN WO2004055196-A2.
XX
PD 01-JUL-2004.
XX
PF 25-NOV-2003; 2003WO-US037831.
XX
PR 25-NOV-2002; 2002US-0429136P.
PR 24-JUL-2003; 2003US-0490234P.
XX
XX (SEQU-) SEQUENOM INC.
XX
PI Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
XX
XX WPI; 2004-517424/49.
XX
PT Identifying a subject at risk of breast cancer comprises detecting the
PT presence or absence of one or more polymorphic variations associated with
PT breast cancer in a nucleic acid sample from a subject.
XX
XX Example 2; Page 59; 83pp; English.
XX
CC The invention describes a method of identifying (M1) a subject at risk of
CC breast cancer. The method comprises detecting the presence or absence of
CC one or more polymorphic variations associated with breast cancer in a
CC nucleic acid sample from a subject. The methods, nucleic acids, proteins,
CC and compositions are useful for diagnosing, preventing, and treating
CC breast cancer. Also described is a method useful for identifying
CC candidate therapeutics for treating breast cancer. This sequence
CC represents a primer used to analyse polymorphisms associated with breast
CC cancer.
XX
SQ Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 2e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2233 ATGAGCTAGTAAGAATTT 2251
DB 1 ATGAGCCAGTACAGAATTT 19

RESULT 196
ADQ29449
ID ADQ29449 standard; DNA; 20 BP.
XX
AC ADQ29449;
XX
XX
DT 07-OCT-2004 (first entry)
XX
DE Human TNF alpha antisense oligonucleotide seqid 380.
XX
KW antimicrobial; antidiabetic; antirheumatic; antiarthritic;
KW gastrointestinal; antiinflammatory; neuroprotective; dermatological;
KW virucide; hepatotropic; human; TNF-alpha; tumour necrosis factor alpha;
KW survivin; TNF-alpha associated disorder; infection; diabetes;
KW rheumatoid arthritis; Crohn's disease; pancreatitis; multiple sclerosis;
KW atopic dermatitis; hepatitis; antisense oligonucleotide;
KW antisense technology; ss.
XX
OS Homo sapiens.
XX
XX
PN US2004142346-A1.
XX
XX
PD 22-JUL-2004.
XX
PF 29-AUG-2003; 2003US-00652795.
XX

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```

PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
PR 02-APR-2001; 2001US-00824322.
PA (BAKE/) BAKER B F.
PA (BENN/) BENNETT C F.
PA (BUTL/) BUTLER M M.
PA (SHAN/) SHANAHAN W R.
XX
XX Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX WPI; 2004-552557/53.
XX
XX New double stranded RNA compound inhibiting expression of human TNF-alpha
XX and survivin, useful for diagnosing, preventing or treating infection,
XX diabetes, arthritis, multiple sclerosis and hepatitis.
XX
XX Example 24; SEQ ID NO 380; 156pp; English.
XX
XX The invention describes a double stranded RNA compound 8-80 nucleobases
XX in length targeted to a nucleic acid molecule encoding human TNF-alpha.
XX where the compound specifically hybridises with the nucleic acid molecule
XX encoding TNF-alpha and inhibits the expression of survivin. Also
XX described is a double stranded RNA compound having a fully defined
XX sequence of 20 bp (SEQ ID NO: 432) as given in the specification. Also
XX disclosed are TNF-alpha polypeptides, host cells, vectors and antibodies
XX used in the methods of the invention. The methods and compositions of the
XX present invention are useful for the diagnosis, prevention and/or
XX treatment of diseases or conditions associated with aberrant expression
XX or activity of TNF-alpha, such as infection, diabetes, rheumatoid
XX arthritis, Crohn's disease, pancreatitis, multiple sclerosis, atopic
XX dermatitis and hepatitis. This sequence represents a human tumour
XX necrosis factor alpha (TNF-alpha) antisense oligonucleotide.
XX
XX Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 2e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 3414 TTTCAGGAGTATCGAAA 3432
DB 1 TCTCAAGGAGTCTGAAA 19

RESULT 197
ADRO2965
ID ADR02965 standard; DNA; 20 BP.
XX
XX ADR02965;
XX
XX 21-OCT-2004 (first entry)
XX
XX Antisense oligonucleotide targeting human TNFalpha ISr104785.
XX
XX Human; tumour necrosis factor alpha; TNFalpha; ss;
XX antisense gene therapy; inflammatory disorder; phosphorothioate linkage;
XX methylene(methylimino) intersugar linkage; infection; autoimmune disease;
XX diabetes; rheumatoid arthritis; Crohn's disease; pancreatitis;
XX multiple sclerosis; atopic dermatitis; inflammatory bowel disease;
XX colitis; hepatitis.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "All Cytidines are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages and 2'-methoxyethyl

```

```

FT residues"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages and 2'-methoxyethyl
XX residues"
XX
XX US2004152652-A1.
XX
XX 05-AUG-2004.
XX
XX 26-AUG-2003; 2003US-00647918.
XX
XX 05-OCT-1998; 98US-00166186.
XX 18-MAY-1999; 99US-00313932.
XX 02-APR-2001; 2001US-00824322.
XX
XX (BAKE/) BAKER B F.
XX (BENN/) BENNETT C F.
XX (BUTL/) BUTLER M M.
XX (SHAN/) SHANAHAN W R.
XX
XX Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX WPI; 2004-580193/56.
XX
XX Treating inflammatory disorders, such as diabetes, rheumatoid arthritis
XX and multiple sclerosis, using antisense oligonucleotides targeted to
XX nucleic acids encoding human tumor necrosis factor-alpha (TNF-alpha).
XX
XX Example 24; SEQ ID NO 380; 145pp; English.
XX
XX The invention relates to treating an inflammatory disorder in an
XX individual comprising administering an oligonucleotide (an antisense
XX oligonucleotide) up to 30 nucleotides in length complementary to a
XX nucleic acid molecule encoding human tumor necrosis factor-alpha (TNF-
XX alpha). The oligonucleotide useful in treating an inflammatory disorder
XX inhibits the expression of the human tumor necrosis factor-alpha, and
XX comprises at least an 8 nucleobase portion of any of 50 20-21 base pair
XX sequences, given in the specification. The antisense oligonucleotide is
XX administered orally, topically or parenterally. The oligonucleotide
XX comprises at least one modified intersugar linkage. The intersugar
XX linkage is a phosphorothioate linkage. The oligonucleotide further
XX comprises at least one 2'-O-methoxyethyl modification and at least one 5-
XX methyl cytidine, where every 2'-O-methoxyethyl modified cytidine residue
XX is a 5-methyl cytidine, and where every cytidine residue is a 5-methyl
XX cytidine. The modified intersugar linkage is a methylene(methylimino)
XX intersugar linkage. The methods and compositions of the present invention
XX are useful for the diagnosis, prevention and/or treatment of diseases or
XX conditions associated with aberrant expression or activity of the TNF-
XX alpha, such as inflammatory, infectious and autoimmune diseases,
XX including diabetes, rheumatoid arthritis, Crohn's disease, pancreatitis,
XX multiple sclerosis, atopic dermatitis, inflammatory bowel disease,
XX colitis and hepatitis. The present sequence is an antisense
XX oligonucleotide targeting the human TNFalpha gene.
XX
XX Sequence 20 BP; 7 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.8; DB 1; Length 20;
XX Best Local Similarity 89.5%; Pred. No. 2e+02;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 3414 TTTCAGGAGTATCGAAA 3432
DB 1 TCTCAAGGAGTCTGAAA 19

RESULT 198
AAZ11675/c
ID AAZ11675 standard; DNA; 21 BP.
XX
XX AAZ11675;
XX

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DT 27-AUG-2003 (revised)
 DT 19-NOV-1999 (first entry)
 XX
 DE Oligo specific for EBV BARF-1 RNA.
 XX
 KW Epstein Barr Virus; EBV infection; viral; gene transcription; EBEB-1;
 KW Epstein Barr early RNA; Epstein Barr nuclear antigen 1; EBNA-1; LMP-1;
 KW Latent membrane protein; LMP-2; vIL10; BCRF-1; BARF1; BDLF2; NASBA;
 KW EBV-associated malignancy; primer; ss.
 OS
 OS Synthetic.
 OS Human herpesvirus 4.
 PN WO9945155-A2.
 XX
 PD 10-SEP-1999.
 XX
 PF 01-MAR-1999; 99WO-BP001392.
 XX
 PR 04-MAR-1998; 98EP-00200655.
 PR 14-DEC-1998; 98EP-00204231.
 XX
 PA (ALKU) AKZO NOBEL NV.
 XX
 XX Vervoort MBHJ, Van Den Brule AJC, Middeldorp JM;
 XX WPI; 1999-551051/46.
 DR
 PT Identifying Epstein Barr Virus infection.
 PS Claim 11; Page 21; 50pp; English.
 CC The invention provides methods for identifying an Epstein Barr Virus
 CC (EBV) infection, that comprises determining viral gene transcription
 CC patterns by amplification of specific RNA sequences. The binding sites of
 CC the oligos suitable for amplification are located in the following genes:
 CC Epstein Barr early RNA (EBEB-1), Epstein Barr nuclear antigen 1 (EBNA-1).
 CC Latent membrane protein 1 (LMP-1), LMP-2, and vIL10 (BCRF-1), BARF1 and
 CC BDLF2. The method comprises (a) amplifying a target sequence within one
 CC or more RNA(s) transcribed from above gene sequences and the (b)
 CC detecting the amplified products, determining the transcription pattern
 CC and identifying the corresponding EBV-associated malignancy. The RNA is
 CC amplified using a transcription based amplification technique such as
 CC NASBA. The invention is used to diagnose malignant and non-malignant EBV-
 CC associated diseases. Sequences AAZ11672-75 represent oligos specific for
 CC BARF-1 RNA. (Updated on 27-AUG-2003 to correct OS field.)
 XX
 SQ Sequence 21 BP; 5 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 2.2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2319 GCTGCCAACATCATCCATG 2337
 DB |||||
 21 GCTGCCAACATCATCCATG 3
 RESULT 199
 AAV72092/c
 ID AAV72092 standard; cDNA; 21 BP.
 XX
 AC AAV72092;
 XX
 DT 12-APR-1999 (first entry)
 XX
 DE Mouse MSP PCR primer #2.
 KW MSP; macrophage stimulating protein; apoptosis; murine; treatment;
 KW neuroendocrine cell; RON receptor; small cell lung carcinoma; tumour;
 KW pathogen infection; thrombocyte production; megakaryocyte maturation;
 KW thrombocytopaenia; hepatocyte growth; PCR primer; ss.
 XX

OS Synthetic.
 OS Mus sp.
 PN WO9855141-A1.
 XX
 PD 10-DEC-1998.
 XX
 PF 04-JUN-1998; 98WO-US011573.
 XX
 PR 04-JUN-1997; 97US-0048594P.
 XX
 PA (BGHM) BRIGHAM & WOMENS HOSPITAL.
 XX
 PI Sunday ME, Willet C;
 XX
 DR WPI; 1999-059877/05.
 XX
 PT Treating tumours derived from neuroendocrine cells with macrophage
 PT stimulating protein - or its nucleic acid, also for preventing
 PT development of these tumours, specifically small cell lung carcinoma.
 XX
 PS Example 2; Page 71; 100pp; English.
 CC AAV72085-V72099 represent PCR primers and probes used in the isolation
 CC and amplification of novel human and murine macrophage stimulating
 CC protein, MSP, which are used in a method for the prophylactic treatment
 CC of a tumour derived from neuroendocrine cells (NEC) by administration of
 CC this MSP to a subject at risk, sufficient to induce apoptosis of NEC
 CC expressing a RON receptor (the receptor for MSP). The method is used to
 CC treat or prevent small cell lung carcinoma and apoptosis of RON-
 CC expressing cells may be induced in vivo or in vitro. Screening NEC from a
 CC patient for susceptibility to MSP-induced apoptosis is used to identify
 CC patients who will benefit from treatment with the MSP protein. MSP is
 CC already known for treating pathogen infections, for stimulating
 CC thrombocyte production and megakaryocyte maturation (for treating
 CC thrombocytopaenia) and for stimulating growth of cells (particularly
 CC hepatocytes)
 XX
 SQ Sequence 21 BP; 4 A; 9 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 2.2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2634 GAAGGACACAGTGGGTACAG 2652
 DB |||||
 20 GAAGGACAGTGGGTACTG 2
 RESULT 200
 AAS22336
 ID AAS22336 standard; DNA; 21 BP.
 XX
 AC AAS22336;
 XX
 DT 24-OCT-2001 (first entry)
 XX
 DE Human COL9A2 PCR primer 1 for Exon 29.
 XX
 KW Human; collagen; COL1A1; COL1A2; COL9A2; COL9A3; ss;
 KW osteoporosis; multiple epiphyseal dysplasia; osteogenesis imperfecta;
 KW shortness of stature; low bone density; gene therapy; PCR primer.
 XX
 OS Homo sapiens.
 XX
 PN US6265157-B1.
 XX
 PD 24-JUL-2001.
 XX
 PF 03-OCT-1997; 97US-00943731.
 XX
 PR 03-DEC-1991; 91US-00803628.
 PR 13-MAR-1994; 94US-00212322.
 XX

XX (UYAL-) UNIV ALLEGHENY HEALTH SCI.
 PA (UYJE-) UNIV JEFFERSON THOMAS.
 PA (UYOU-) UNIV OULU.
 XX
 PI Brockop DJ, Spotila LD, Deltas CD, Sereda L;
 PI Westerhausen Larson A, Pack M, Collige A, Early J, Koerkhoe J;
 PI Ala-Kokko L, Annunen S, Pihlajamaa T, Vuoristo M, Paasila P;
 XX
 DR WPI; 2001-432201/46.
 XX
 PT Detecting collagen gene alteration, useful for diagnosing osteoporosis,
 PT multiple epiphyseal dysplasia, osteogenesis imperfecta, shortness of
 PT stature and low bone density in humans.
 XX
 PS Callim 8; Fig24; 617pp; English.
 XX
 CC The invention relates to Detecting a collagen gene alteration associated
 CC with a pathological condition in a human subject by obtaining from the
 CC subject a sample nucleic acid containing a portion of at least 15
 CC consecutive nucleotides of the segment of the COL1A1 gene extending in
 CC the 5' to 3' direction from 78 nucleotides of intron 27 located adjacent
 CC exon 28 through the 3' end of intron 51, where the portion contains an
 CC intronic nucleotide and a first and second site, determining the sequence
 CC of the portion and comparing the sequence of the portion with the
 CC corresponding consensus sequence of the COL1A1 gene where a difference
 CC between the sequence of the portion and the consensus sequence indicates
 CC the presence of the collagen alteration in the subject. The method is
 CC used for detecting abnormalities in a COL1 or COL9 gene. The method is
 CC determining whether a subject is afflicted with pathological conditions
 CC associated with an altered collagen gene such as osteoporosis, multiple
 CC epiphyseal dysplasia, osteogenesis imperfecta, shortness of stature and
 CC low bone density. Identification of an abnormality in a collagen gene is
 CC also useful for designing a therapeutic nucleotide or gene therapy agent
 CC which can be administered to the subject to correct or alleviate the
 CC abnormality. The method is useful for detecting mutations in both the
 CC coding and non-coding sequences of any of the COL1 or COL9 genes.
 CC Therefore the method can be used to detect collagen gene alterations
 CC which affect either the primary sequence of a collagen protein chain,
 CC splicing of the mRNA encoding such chains or regulation of expression of
 CC the genes encoding such chains. The present sequence is a PCR primer
 CC which amplifies a nucleic acid from a collagen gene of the invention
 XX
 SQ Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 2.2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1921 AACACACAGAGTTCTCTGCA 1939
 DB 1 AACACACAGAGTTCTCTCCA 19
 RESULT 201
 ID ADH49192/c
 XX ADH49192 standard; DNA; 21 BP.
 AC ADH49192;
 XX
 DT 25-MAR-2004 (first entry)
 DE NOV72 PCR primer, SEQ ID 476.
 XX
 KW Human; NOVX; atherosclerosis; hypertension; obesity; cancer; cytostatic;
 KW hypotensive; antiarteriosclerotic; anorectic; gene therapy; NOV72; PCR;
 KW primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200268652-A2.
 XX
 PD 06-SEP-2002.

XX 26-FEB-2002; 2002WO-US005910.
 XX
 PR 26-FEB-2001; 2001US-0271646P.
 PR 27-FEB-2001; 2001US-0271840P.
 PR 28-FEB-2001; 2001US-0272404P.
 PR 28-FEB-2001; 2001US-0272405P.
 PR 28-FEB-2001; 2001US-0272410P.
 PR 28-FEB-2001; 2001US-0272414P.
 PR 02-MAR-2001; 2001US-0272787P.
 PR 02-MAR-2001; 2001US-0272922P.
 PR 02-MAR-2001; 2001US-0273048P.
 PR 02-MAR-2001; 2001US-0273300P.
 PR 16-MAR-2001; 2001US-0276401P.
 PR 20-MAR-2001; 2001US-0277324P.
 PR 20-MAR-2001; 2001US-0278660P.
 PR 30-MAR-2001; 2001US-0280039P.
 PR 30-MAR-2001; 2001US-0280234P.
 PR 02-APR-2001; 2001US-0280818P.
 PR 12-APR-2001; 2001US-0283443P.
 PR 23-APR-2001; 2001US-0285754P.
 PR 24-APR-2001; 2001US-0286096P.
 PR 03-MAY-2001; 2001US-0288353P.
 PR 17-MAY-2001; 2001US-0291703P.
 PR 31-MAY-2001; 2001US-0294834P.
 PR 20-JUN-2001; 2001US-0296959P.
 PR 21-JUN-2001; 2001US-0299845P.
 PR 05-JUL-2001; 2001US-0303242P.
 PR 13-AUG-2001; 2001US-0311981P.
 PR 16-AUG-2001; 2001US-0312858P.
 PR 17-AUG-2001; 2001US-0313280P.
 PR 29-AUG-2001; 2001US-0315614P.
 PR 17-SEP-2001; 2001US-0322818P.
 PR 25-FEB-2002; 2002US-00322818.
 XX
 PA (CURA-) CURAGEN CORP.
 XX
 PI Alsebrook JP, Anderson DW, Ballinger RA, Boldog FL, Burgess CE;
 PI Casman SJ, Ellerman KE, Gangolli EA, Gerlach VL, Gilbert JA;
 PI Gorman L, Guo X, Gusev VI, Kekuda R, Li L, Liu X, Malyankar UM;
 PI Miller CE, Millet I, Padigaru M, Patturajan M, Pena CEA, Peyman JA;
 PI Rastelli L, Shenoy SG, Shimkets RA, Smithson G, Spytek KA, Stone DJ;
 PI Taupier RJ, Tchernev VT, Vernet CAM, Zerhusen BD;
 XX
 DR WPI; 2002-698672/75.
 XX
 PT New NOVX polypeptides or polynucleotides, useful for preventing or
 PT treating disorders or syndromes e.g., atherosclerosis, hypertension,
 PT obesity or cancer.
 XX
 PS Example 2; Page 855; 923pp; English.
 XX
 CC The present invention relates to novel human NOVX proteins, where X is
 CC any number from 1 to 91 and their coding sequences (see ADH48717-
 CC ADH48930). The proteins and coding sequences are useful for preventing or
 CC treating disorders or syndromes e.g. atherosclerosis, hypertension,
 CC obesity or cancer. The present sequence was used in an example from the
 CC invention.
 XX
 SQ Sequence 21 BP; 2 A; 5 C; 5 G; 9 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.8; DB 1; Length 21;
 Best Local Similarity 89.5%; Pred. No. 2.2e+02;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 2626 GGAATCCAGAGGAGCAAGT 2644
 DB 21 GGAAACACACAGGACAGT 3
 RESULT 202
 ID AAQ90158/c
 ID AAQ90158 standard; DNA; 20 BP.

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XX AC AAQ90158;
XX DT 25-MAR-2003 (revised)
XX DT 01-NOV-1995 (first entry)
XX DE Pollen allergen gene primer 2.
XX DE Japanese cedar; pollen; allergen; allergy; therapy; diagnostic;
KW desensitizer; Cryptomeria japonica; polymerase chain reaction; PCR;
KW primer; ss.
XX OS Synthetic.
XX PN EP655500-A1.
XX PD 31-MAY-1995.
XX PF 03-NOV-1994; 94EP-00308117.
XX PR 05-NOV-1993; 93JP-00299151.
XX PR 20-DEC-1993; 93JP-00344596.
XX PR 27-DEC-1993; 93JP-00346814.
XX PA (HAYB ) HAYASHIBARA SEIBUTSU KAGAKU.
XX PI Namba M, Torigoe K, Kurimoto M;
XX WI WPI; 1995-195588/26.
XX DT New Japanese cedar pollen allergen polypeptide - and DNA coding for it,
PT useful for treatment and diagnosis of cedar pollen allergy.
XX PS Disclosure; Page 8; 41pp; English.
XX CC The primers given in AAQ90157-58 are based on a portion of an allergen
CC purified from Japanese cedar pollen, and were used to isolate clone SC09
CC bearing a partial sequence (nt 173-240 of the sequence given in AAQ90156)
CC of the allergen gene by PCR amplification of pollen-derived cDNA.
XX CC (updated on 25-MAR-2003 to correct FN field.)
XX SQ Sequence 20 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 2 Other;

Query Match 0.4%; Score 15.6; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 2.1e+02;
Matches 15; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2660 TTGGCAGGAGCAACATC 2677
DB 18 WTGGCARGCAGCAACATC 1
:||||:|||||

RESULT 203
AAT81553
ID AAT81553 standard; RNA; 17 BP.
XX AC AAT81553;
XX DT 14-DEC-1997 (first entry)
XX DE Human c-myb hammerhead ribozyme target sequence (nt. position 2889).
XX KW Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW coronary angioplasty; ss.
XX OS Homo sapiens.
XX PN WO9531541-A2.
XX PD 23-NOV-1995.
XX PF 18-MAY-1995; 95WO-US006368.

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XX PR 18-MAY-1994; 94US-00245466.
XX PR 13-JAN-1995; 95US-00373124.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX WI WPI; 1996-010927/01.
XX PT New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
PT for treating restenosis or cancer.
XX PS Claim 1; Page 78; 128pp; English.
XX CC The present sequence represents the preferred target sequence for an
CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC the human c-myb sequence at the base position indicated in the descriptor
CC line. The c-myb sequence was screened for optimal ribozyme target sites
CC using a computer folding algorithm, and regions of the mRNA which did not
CC form secondary folding structures and contained potential ribozyme
CC cleavage sites were identified. Ribozymes were synthesised and their
CC activities optimised by either varying the length of the binding arms or
CC by modification to prevent degradation by nucleases. The ribozymes cleave
CC the c-myb sequence and can be used to prevent smooth muscle cell
CC hyperproliferation in restenosis, especially after coronary angioplasty,
CC and in cancers
XX SQ Sequence 17 BP; 5 A; 0 C; 0 G; 0 T; 12 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 23.5%; Pred. No. 1.7e+02;
Matches 4; Conservative 12; Mismatches 1; Indels 0; Gaps 0;

QY 3305 TTTTATTTTATATAT 3321
DB 1 UUUUUAUUUUUAUUAU 17
:||||:||||:|

RESULT 204
AAC70462
ID AAC70462 standard; DNA; 17 BP.
XX AC AAC70462;
XX DT 09-FEB-2001 (first entry)
XX DE Single nucleotide polymorphism PCR primer #195.
XX KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200058519-A2.
XX PD 05-OCT-2000.
XX PF 30-MAR-2000; 2000WO-US008440.
XX PR 31-MAR-1999; 99US-0127248P.
XX PA (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX PA (AFY-) AFFYMETRIX INC.
XX PI Alshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
XX PI Lipshutz RJ, Patil N, Sklar P;
XX WI WPI; 2000-611722/58.
XX PT Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful

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PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.

PS Claim 8; Fig 5; 214pp; English.

XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases

SQ Sequence 17 BP; 6 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 492 ACAGGAACCCCATCCA 508
Db 1 ACAGGAAGCCCATCCA 17

RESULT 205

AAC70489
ID AAC70489 standard; DNA; 17 BP.

XX AAC70489;

DT '09-FEB-2001 (first entry)

DE Single nucleotide polymorphism PCR primer #213.

KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.

OS Homo sapiens.

PN WO200058519-A2.

PD 05-OCT-2000.

PF 30-MAR-2000; 2000WO-US008440.

PR 31-MAR-1999; 99US-0127248P.

PA (WHED) WHITEHEAD INST BIOMEDICAL RES.

PA (AFFY-) AFFYMETRIX INC.

PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;

PI Lipshutz RJ, Patil N, Sklar P;

DR WPI; 2000-611722/58.

XX Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.

PS Claim 8; Fig 5; 214pp; English.

XX The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's

CC diseases

XX Sequence 17 BP; 6 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 492 ACAGGAACCCCATCCA 508
Db 1 ACAGGAAGCCCATCCA 17

RESULT 206

ACN03131

ID ACN03131 standard; RNA; 17 BP.

XX ACN03131;

DT 22-APR-2004 (first entry)

DE WNV Inozyme substrate SEQ ID NO 3134.

KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW viricide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
KW Amberyne; Zinzyme; ss.

OS West Nile Virus.

PN WO200268637-A2.

PD 06-SEP-2002.

PF 19-OCT-2001; 2001WO-US048350.

PR 20-OCT-2000; 2000US-0242411P.

PA (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J A.

PI Blatt L, Mcswiggen JA;

DR WPI; 2002-706994/76.

XX New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.

PS Claim 23; SEQ ID NO 3134; 495pp; English.

XX The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberyne and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention

SQ Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 1.7e+02;
Matches 14; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

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QY 3758 GACACAGATGGCTGGGA 3774
DB 1 GACACAGCGUGCGGGA 17

RESULT 207
ACN09948/c
ID ACN09948 standard; RNA; 17 BP.
XX AC ACN09948;
XX DT 22-APR-2004 (first entry)
XX DE WNV minus strand Inozyme substrate SEQ ID NO 9951.
XX KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
XX KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
XX KW encephalitis; myocarditis; meningitis; infection; hepatitis;
XX KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNazyme;
XX KW Amberzyme; Zinzyme; ss.
XX OS West Nile Virus.
XX PN WO200268637-A2.
XX PD 06-SEP-2002.
XX PF 19-OCT-2001; 2001WO-US048350.
XX PR 20-OCT-2000; 2000US-024241P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PA (BLAT/) BLATT L.
XX PA (MCSW/) MCSWIGGEN J A.
XX PI Blatt L, Mcswiggen JA;
XX DR WPI; 2002-706994/76.
XX PT New nucleic acid molecule that modulates replication of West Nile Virus
XX PT (WNV), useful for treating a condition related to WNV infection e.g.
XX PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX PS Claim 23; SEQ ID NO 9951; 495pp; English.
XX CC The invention relates to nucleic acid molecules that modulate replication
XX CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
XX CC treating a condition related to WNV infection e.g. pancreatitis,
XX CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
XX CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
XX CC molecule is selected from the group of ribozymes consisting of
XX CC Hammerhead, Inozyme, G-cleaver, DNazyme, Amberzyme and Zinzyme. The
XX CC nucleic acid molecules further comprise at least five ribose residues, at
XX CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
XX CC least three of the 5' terminal nucleotides and a 3' end modification of a
XX CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
XX CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
XX CC in the specification. The present sequence is that of a nucleic acid
XX CC molecule of the invention
XX SQ Sequence 17 BP; 2 A; 7 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3758 GACACAGATGGCTGGGA 3774
DB 17 GACACAGCTGGCTGGGA 1

RESULT 208
ID ACN09948
ID ACN09948 standard; RNA; 17 BP.

ABT35599/c
ID ABT35599 standard; DNA; 17 BP.
XX AC ABT35599;
XX DT 12-JUN-2003 (first entry)
XX DE Tumour suppression related human fukutin oligo SEQ ID NO 1236.
XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX KW schizophrenia; protein chip; gene therapy; tumour suppression;
XX KW human fukutin; ds.
XX OS Homo sapiens.
XX PN WO2003025175-A2.
XX PD 27-MAR-2003.
XX PF 17-SEP-2002; 2002WO-IB004208.
XX PR 17-SEP-2001; 2001FR-00011978.
XX PA (MOLE-) MOLECULAR ENGINES LAB.
XX PI Telerman A, Amson R, Tuijnder M;
XX DR WPI; 2003-313353/30.
XX PT New isolated nucleic acid, useful for treating viral diseases associated
XX PT with tumors and cell degeneration, also related polypeptides, antibodies
XX PT and transfected cells.
XX PS Disclosure; Page 177; 720pp; French.
XX CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX CC given in the specification, a sequence containing at least 15 consecutive
XX CC nucleotides from the 17 mer sequence, a sequence with, after optimal
XX CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX CC hybridizes to them under highly stringent conditions, or the complement
XX CC of any of them, or the corresponding RNA. The novel isolated nucleic
XX CC acids of the invention are useful as probes and primers for detecting,
XX CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX CC component of a gene chip, in vitro as (anti)sense reagents, and for
XX CC production of recombinant polypeptides. Any of the nucleic acids,
XX CC polypeptides, vectors containing the nucleic acids, cells containing the
XX CC vector or antibodies directed against the polypeptides are useful for
XX CC preparation of pharmaceuticals for prevention and/or treatment of viral
XX CC diseases that are characterised by development of tumours or cell
XX CC degeneration, specifically cancer but also Alzheimer's disease and
XX CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX CC patient samples is useful for diagnosis and/or prognosis of these
XX CC diseases. The polypeptides can also be used to generate antibodies, and
XX CC both the polypeptide and antibodies are useful as components of protein
XX CC chips. The nucleic acid sequences of the invention can be used in gene
XX CC therapy. This polynucleotide sequence represents a tumour suppression
XX CC related human fukutin oligonucleotide of the invention
XX SQ Sequence 17 BP; 6 A; 4 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.7e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2411 TGAATATGAGATTGCTC 2427
DB 17 TGAATATGAGATTGATC 1

RESULT 209
ACD54465
ID ACD54465 standard; RNA; 17 BP.
```

XX AC ACD54465;
 XX DT 24-SEP-2003 (first entry)
 XX DE HBV DNAzyme substrate sequence #24.
 XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 XX KW RNA stability; RNA expression; RNA synthesis; antisense;
 XX KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
 XX KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
 XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 XX KW viricide; antiinflammatory; substrate; ss.
 XX OS Hepatitis B virus.
 XX PN WO200281494-A1.
 XX PD 17-OCT-2002.
 XX PF 26-MAR-2002; 2002WO-US009187.
 XX PR 26-MAR-2001; 2001US-00817879.
 XX PR 08-JUN-2001; 2001US-00877478.
 XX PR 08-JUN-2001; 2001US-0296876P.
 XX PR 24-OCT-2001; 2001US-0335059P.
 XX PR 05-DEC-2001; 2001US-0337055P.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PA (BLAT/) BLATT L.
 XX PA (MACE/) MACEJAK D.
 XX PA (MCSW/) MCSWIGGEN J.
 XX PA (MORR/) MORRISSEY D.
 XX PA (PAVC/) PAVCO P.
 XX PA (LEEP/) LEE P.
 XX PA (DRAP/) DRAPER K.
 XX PA (ROBE/) ROBERTS E.
 XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 XX PI Draper K, Roberts E;
 XX DR WPI; 2003-229207/22.
 XX PT Novel compound useful for treating cirrhosis, liver failure,
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 XX PT infection.
 XX PS Example 1; Page 184; 387pp; English.
 XX CC The present invention relates to nucleic acid molecules which modulate
 XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
 XX CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
 XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
 XX CC genes and HBV viral replication. Also disclosed is a method for screening
 XX CC compounds and/or potential therapies directed against HBV, and compounds
 XX CC that modulate the expression and/or replication of HCV. The compounds and
 XX CC methods of the invention are useful for the treatment of degenerative and
 XX CC disease states related to HBV and HCV infection, replication and gene
 XX CC expression such as cirrhosis, liver failure, and hepatocellular
 XX CC carcinoma. The present sequence represents a substrate for one of the HBV
 XX CC ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberyne sequences
 XX CC disclosed in the present invention
 XX SQ Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 17;

Best Local Similarity 58.8%; Pred. No. 1.7e-02;
 Matches 10; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
 QY 528 TTTTCTGGACTATCAAG 544
 Db ::::|||||:|:|:|
 1 UCUCUGGACUAUCAAAG 17
 RESULT 210
 ACD51886
 ID ACD51886 standard; RNA; 17 BP.
 XX AC ACD51886;
 XX DT 24-SEP-2003 (first entry)
 XX DE HBV inozyme substrate sequence #118.
 XX KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 XX KW RNA stability; RNA expression; RNA synthesis; antisense;
 XX KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
 XX KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 XX KW HBV reverse transcriptase; Enhancer I region; viral replication;
 XX KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 XX KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 XX KW viricide; antiinflammatory; substrate; ss.
 XX OS Hepatitis B virus.
 XX PN WO200281494-A1.
 XX PD 17-OCT-2002.
 XX PF 26-MAR-2002; 2002WO-US009187.
 XX PR 26-MAR-2001; 2001US-00817879.
 XX PR 08-JUN-2001; 2001US-00877478.
 XX PR 08-JUN-2001; 2001US-0296876P.
 XX PR 24-OCT-2001; 2001US-0335059P.
 XX PR 05-DEC-2001; 2001US-0337055P.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PA (BLAT/) BLATT L.
 XX PA (MACE/) MACEJAK D.
 XX PA (MCSW/) MCSWIGGEN J.
 XX PA (MORR/) MORRISSEY D.
 XX PA (PAVC/) PAVCO P.
 XX PA (LEEP/) LEE P.
 XX PA (DRAP/) DRAPER K.
 XX PA (ROBE/) ROBERTS E.
 XX PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 XX PI Draper K, Roberts E;
 XX DR WPI; 2003-229207/22.
 XX PT Novel compound useful for treating cirrhosis, liver failure,
 XX PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 XX PT infection.
 XX PS Example 1; Page 152; 387pp; English.
 XX CC The present invention relates to nucleic acid molecules which modulate
 XX CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 XX CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 XX CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
 XX CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
 XX CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 XX CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 XX CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 XX CC DNA. The nucleic acids may be used to modulate the expression of HBV
 XX CC genes and HBV viral replication. Also disclosed is a method for screening
 XX CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC disclosed in the present invention

CC mutations within diseased cells, for detecting the presence of HBV RNA in
CC a cell, for the study of RNA and for down-regulating gene expression of
CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
CC sequence represents an HBV RNA target sequence, used in the scope of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.

CC a cell, for the study of RNA and for down-regulating gene expression of
 CC target genes in bacterial, fungal, viral, plant or mammalian cells. This
 CC sequence represents an HBV RNA target sequence, used in the scope of the
 CC invention. Note: The sequence data for this patent is also available in
 CC electronic format from USPTO at seqdata.uspto.gov/sequence.html.

XX Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;
 SQ Query Match 0.4%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 58.8%; Pred. No. 1.7e+02;
 Matches 10; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

OY 528 TTTTCGAGCTATCAAG 544
 Db 1 UCUUCUGGACUAUCAAAG 17

RESULT 213

AAT56721/c

ID AAT56721 standard; RNA; 18 BP.

XX AAT56721;

XX 25-MAR-2003 (revised)

DT 02-APR-1997 (first entry)

XX Human TNF-alpha hairpin ribozyme target sequence (nt position 1178).

XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
 KW translocation; chronic myelogenous leukaemia; CML; cancer;
 KW Philadelphia chromosome; inflammation; autoimmune disease;
 KW atherosclerosis; myocardial infarction; stroke; restenosis;
 KW transplant rejection; rheumatoid arthritis; psoriasis;
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
 ss.

XX Homo sapiens.
 OS
 XX
 XX
 PN WO9523225-A2.
 XX
 XX
 PD 31-AUG-1995.
 XX
 XX
 PF 23-FEB-1995; 95WO-IB000156.
 XX
 XX
 PR 23-FEB-1994; 94US-00201109.
 PR 29-MAR-1994; 94US-00218934.
 PR 04-APR-1994; 94US-00222795.
 PR 07-APR-1994; 94US-00224483.
 PR 15-APR-1994; 94US-00227958.
 PR 15-APR-1994; 94US-00228041.
 PR 18-MAY-1994; 94US-00245736.
 PR 06-JUL-1994; 94US-00271280.
 PR 15-AUG-1994; 94US-00291932.
 PR 16-AUG-1994; 94US-00291433.
 PR 17-AUG-1994; 94US-00292620.
 PR 19-AUG-1994; 94US-00293520.
 PR 02-SEP-1994; 94US-00300000.
 PR 08-SEP-1994; 94US-00303039.
 PR 23-SEP-1994; 94US-00311486.
 PR 23-SEP-1994; 94US-00311749.
 PR 28-SEP-1994; 94US-00314397.
 PR 03-OCT-1994; 94US-00316771.
 PR 07-OCT-1994; 94US-00319492.
 PR 11-OCT-1994; 94US-00321993.
 PR 04-NOV-1994; 94US-00334847.
 PR 10-NOV-1994; 94US-00337608.
 PR 28-NOV-1994; 94US-00345516.
 PR 16-DEC-1994; 94US-00357577.
 PR 23-DEC-1994; 94US-00363233..

PR 30-JAN-1995; 95US-00380734.

XX (RIBO-) RIBOZYME PHARM INC.

XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;

PI Grimm S, Karpeisky A, Kiseich K, Matulic-Adamic J, McSwiggen JA;

PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

PI Tracz D, Usman N, Wincott FE, Woolf T;

XX WPI; 1995-351090/45.

DR Ribozymes having modified bases and methods for producing them - for use

XX in inhibiting disease related genes.

XX Claim 2; Page 259; 407pp; English.

XX The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
 CC the nucleotide base position indicated in the DE line. Regions of the
 CC mRNA that do not form secondary folding structures and that contain
 CC potential hammerhead and hairpin ribozyme cleavage sites were identified
 CC by computer analysis. Ribozymes directed against these mRNA sequences
 CC were designed and synthesised with modifications that improve their
 CC nuclease resistance. The ribozymes are designed to cleave the target
 CC sequences and thereby inhibit TNF-alpha expression, making them
 CC potentially useful for treating rheumatoid arthritis, septic shock and
 CC other inflammatory disorders including psoriasis, as well as for
 CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)

XX SQ Sequence 18 BP; 3 A; 5 C; 3 G; 0 T; 7 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.9e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 3416 TCAAGGAAGTATGGAAA 3432

Db 18 TCAAGGAAGTCTGGAAA 2

RESULT 214

AAT61999

ID AAT61999 standard; DNA; 18 BP.

XX AAT61999;

XX 08-DEC-1997 (first entry)

DE Probe 3 for Auxis thazard detection.

XX detection; nucleic acid; aqueous solution; length analysis; repeat unit;
 KW microsatellite marker; repetitive element; microorganism; probe;
 KW genotyping; clinical diagnosis; quantification; sequencing; mutation; ss.

OS Synthetic.

XX DE19533354-A1.

XX 13-MAR-1997.

XX 08-SEP-1995; 95DE-01033354.

XX 08-SEP-1995; 95DE-01033354.

XX (OZKA/) OZKAN D.

XX Ozkan D;

XX WPI; 1997-166755/16.

XX Nucleic acid assay - involving interlinking circular nucleic acid

XX molecules.

PS Example 3; Page 7; 10pp; German.

XX A new method for detection of nucleic acids in aqueous solution is claimed, which may be used for length analysis of repeat unit containing sections of microsatellite markers or other repetitive elements. The method may also be used for microorganism detection, parallel detection of several target nucleic acids using several primer pairs for enzymatic amplification and/or several differently labelled detection probes and/or 2nd probes, genotype determination, determining relatedness of organisms, clinical diagnosis, food chemistry, anthropology, forensic analysis, specific quantification of nucleic acids, determining the RNA concentration of tumour markers, determining nucleic acid sequences for antigenic determinants, nucleic acid sequence analysis, mutation analysis and determining genetic changes involved in the development of drug resistance. AAT61997-62000 are species specific probes for detection of CC Auxis thazard using the new method

XX Sequence 18 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3125 TGATGACTGCAGTCGTC 3141
Db 1 TGATGACTGCATTCGTC 17

RESULT 215
AAS11810
ID AAS11810 standard; DNA; 18 BP.
AC AAS11810;
XX
XX 24-OCT-2001 (first entry)
DE Human surfactant protein B, SPB, probe 5' SPB-fl.
XX
XX Human; surfactant protein B; SPB; Thyroid transcription factor; TTF-1;
KW lung cancer; thyroid cancer; 5' SPB-fl; ss; probe; HNF-3; EMSA;
KW electrophoretic mobility shift assay.
XX
XX Homo sapiens.
XX
XX US2001016352-A1.
PN
XX 23-AUG-2001.
PD
XX 26-MAY-1999; 99US-00320337.
PF
XX 18-MAY-1994; 94US-00245356.
PR
XX 17-MAY-1995; 95US-00442809.
PR
XX (BOHI/) BOHINSKI R J.
PA (WHIT/) WHITSETT J A.
XX
XX Bohinski RJ, Whitsett JA;
PI
XX WPI; 2001-513959/56.
DR
XX 26-MAY-1999; 99US-00320337.
PF
XX 18-MAY-1994; 94US-00245356.
PR
XX 17-MAY-1995; 95US-00442809.
PR
XX (BOHI/) BOHINSKI R J.
PA (WHIT/) WHITSETT J A.
XX
XX Bohinski RJ, Whitsett JA;
PI
XX WPI; 2001-513959/56.
DR
XX Oligonucleotide sequences which bind nuclear proteins and surfactants found in lung cells, useful for detecting cancers that originate in the PT lung.
PT
XX Example 2; Fig 10a; 76pp; English.
PS The invention relates to an oligonucleotide which includes at least 1 CC nucleic acid sequence which binds to at least 1 nuclear protein found in CC lung cells (e.g. the thyroid transcription factor 1, TTF-1, protein). The CC oligonucleotide can be expressed in lung cells via a vector and can be CC used to target therapeutic agents to kill lung or thyroid cancer cells. CC The oligonucleotide can be used to detect or diagnose lung or thyroid CC cancer. The oligonucleotides may be designed from the sequences of, for CC example, the promoters of lung-specific genes such as those encoding CC surfactant proteins. The present sequence is a Human surfactant protein CC B, SPB, probe 5' fl based on the SPB-fl probe and is used to identify TTF- CC 1 and HNF-3 binding sites in the SPB promoter using EMSA, electrophoretic CC mobility shift assay
XX Sequence 18 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

CC example, the promoters of lung-specific genes such as those encoding CC surfactant proteins. The present sequence is a Human surfactant protein CC B, SPB, probe 5' SPB-fl and is used to identify TTF-1 and HNF-3 binding CC sites in the SPB promoter using EMSA, electrophoretic mobility shift CC assay
XX Sequence 18 BP; 2 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1798 CCTCCAGGTCCTTGAT 1814
Db 2 CCTCCAGGTCCTTGAT 18

RESULT 216
AAS11808/c
ID AAS11808 standard; DNA; 18 BP.
XX
AC AAS11808;
XX
XX 24-OCT-2001 (first entry)
DE Human surfactant protein B, SPB, probe 5' fl.
XX
XX Human; surfactant protein B; SPB; Thyroid transcription factor; TTF-1;
KW lung cancer; thyroid cancer; 5' fl; ds; probe; HNF-3; EMSA;
KW electrophoretic mobility shift assay.
XX
XX Homo sapiens.
XX
XX US2001016352-A1.
PN
XX 23-AUG-2001.
PD
XX 26-MAY-1999; 99US-00320337.
PF
XX 18-MAY-1994; 94US-00245356.
PR
XX 17-MAY-1995; 95US-00442809.
PR
XX (BOHI/) BOHINSKI R J.
PA (WHIT/) WHITSETT J A.
XX
XX Bohinski RJ, Whitsett JA;
PI
XX WPI; 2001-513959/56.
DR
XX Oligonucleotide sequences which bind nuclear proteins and surfactants found in lung cells, useful for detecting cancers that originate in the PT lung.
PT
XX Example 2; Fig 9a; 76pp; English.
PS The invention relates to an oligonucleotide which includes at least 1 CC nucleic acid sequence which binds to at least 1 nuclear protein found in CC lung cells (e.g. the thyroid transcription factor 1, TTF-1, protein). The CC oligonucleotide can be expressed in lung cells via a vector and can be CC used to target therapeutic agents to kill lung or thyroid cancer cells. CC The oligonucleotide can be used to detect or diagnose lung or thyroid CC cancer. The oligonucleotides may be designed from the sequences of, for CC example, the promoters of lung-specific genes such as those encoding CC surfactant proteins. The present sequence is a Human surfactant protein CC B, SPB, probe 5' fl based on the SPB-fl probe and is used to identify TTF- CC 1 and HNF-3 binding sites in the SPB promoter using EMSA, electrophoretic CC mobility shift assay
XX Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1798 CCTCCAGGTTCTTGAT 1814
DB 17 CCTCCAGGTTCTTGAT 1

RESULT 217
ABL95898/c
ID ABL95898 standard; DNA; 18 BP.
XX
AC ABL95898;
XX
DT 19-JUN-2002 (first entry)
XX
DE Probe d for assaying nucleic acids.
XX
KW Probe; polymorphism detection; mutation detection; disease diagnosis;
KW microbial identification; ss.
XX
OS Unidentified.
XX
PN WO200208414-A1.
XX
PD 31-JAN-2002.
XX
PF 27-JUN-2001; 2001WO-IB001147.
XX
PR 27-JUN-2000; 2000JP-00193133.
PR 03-AUG-2000; 2000JP-00236115.
PR 26-SEP-2000; 2000JP-00292483.
XX
PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA (KANK-) KANKYO ENG CO LTD.
XX
PI Kurane R, Kanagawa T, Kanagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
XX
WPI; 2002-195876/25.
XX
Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX
Example 12; Page 60; 152pp; Japanese.
XX
The present invention relates to nucleic acid probes, which are useful
for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
CC the invention.
XX
SQ Sequence 18 BP; 14 A; 0 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3305 TTTTATTTTATATAT 3321
DB 18 TTTTATTTTATATAT 2

RESULT 218
ADG73198
ID ADG73198 standard; DNA; 18 BP.
XX
AC ADG73198;

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XX 11-MAR-2004 (first entry)
DT
DE Pseudomonas syringae pv. tomato DC3000 Hop gene PCR primer #45.
XX
KW Avr; Hop; transgenic plant; disease resistance; cancer; bacteria;
KW metabolic pathway; eukaryotic cell death; programmed cell death;
KW cytostatic; PCR; primer; ss.
XX
OS Pseudomonas syringae; pv. tomato str. DC3000.
XX
PN US2003204868-A1.
XX
PD 30-OCT-2003.
XX
PF 12-FEB-2003; 2003US-00365742.
XX
PR 12-FEB-2002; 2002US-0356408P.
PR 10-MAY-2002; 2002US-0380185P.
XX
(COLL/) COLLIER A.
PA (ALFA/) ALFANO J R.
PA (CART/) CARTINHOOR S W.
PA (SCHN/) SCHNEIDER D J.
PA (TANG/) TANG X.
XX
Collmer A, Alfano JR, Cartinhour SW, Schneider DJ, Tang X;
WPI; 2003-875735/81.
XX
New nucleic acid, useful in imparting disease resistance to a plant or in
PT preparing a composition for treating cancer.
XX
Example; SEQ ID NO 192; 209pp; English.
XX
The present invention relates to the isolation of Pseudomonas syringae
CC pv. tomato DC3000 Avr/Hop proteins, and the polynucleotide sequences
CC encoding them. Also disclosed are expression vectors, host cells, and
CC transgenic plants comprising polynucleotide sequences of the invention.
CC The polynucleotide and polypeptide sequences are useful in imparting
CC disease resistance to a plant or in preparing a composition for treating
CC cancer. The sequences may also be used to make a plant hypersusceptible
CC to colonisation by nonpathogenic bacteria, modify a metabolic pathway in
CC a cell, cause eukaryotic cell death, and inhibit programmed cell death.
CC The present sequence represents a PCR primer used in the examples of the
CC present invention.
XX
SQ Sequence 18 BP; 5 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.9e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2896 GCATTTCACCAACTCA 2912
DB 2 GCATTTCACCAACTCA 18

RESULT 219
ADL12254
ID ADL12254 standard; DNA; 18 BP.
XX
AC ADL12254;
XX
DT 06-MAY-2004 (first entry)
XX
DE Pseudomonas syringae anti-cancer gene primer #65.
XX
KW cytostatic; gene therapy; Avr; Hop; cancer; primer; ss.
XX
OS Pseudomonas syringae; pv tomato DC3000.
XX
PN WO2003068930-A2.

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XX PD 21-AUG-2003.
XX PS
XX XX the obtained data.
XX PS Example 5; Page 17; 34pp; Japanese.
XX CC This invention relates to a method for measuring nucleic acids using a
XX CC nucleic acid probe labelled with a fluorochrome. The nucleic acid probe
XX CC decreases the fluorescence of the fluorochrome when hybridised with a
XX CC target nucleic acid, the decrease in the fluorescence is measured. The
XX CC method can be used for measuring a target nucleic acid
XX SQ Sequence 19 BP; 15 A; 0 C; 0 G; 4 T; 0 U; 0 Other;
    Query Match 0.4%; Score 15.4; DB 1; Length 19;
    Best Local Similarity 94.1%; Pred. No. 2e+02;
    Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 3305 TTTTATTTTATATAT 3321
DB 18 TTTTATTTTATATAT 2
RESULT 221
AAQ41846/c
ID AAQ41846 standard; DNA; 20 BP.
XX AC AAQ41846;
XX DT 25-MAR-2003 (revised)
XX DT 03-SEP-1993 (first entry)
XX DE CHO C2 and C2' complex AT rich binding site #4.
XX KW Myc; c-myc; mammalian; E box; cancer; therapy; C1; C2; C2'; complex;
XX KW homo-oligomer; hetero-oligomer; myogenin; Max; oncoprotein; primer;
XX KW probe; electrophoretic mobility shift assay; EMSA; ss.
XX OS Synthetic.
XX PN WO9308701-A1.
XX PD 13-MAY-1993.
XX PF 09-OCT-1992; 92WO-US008603.
XX PR 30-OCT-1991; 91US-00785567.
XX PA (GEO ) GEN HOSPITAL CORP.
XX PI Kingston RE, Papoulas O;
XX DR WPI; 1993-167291/20.
XX PT Prodn. of c-Myc protein from mammalian cells - and detection of c Myc
XX PT inhibitors for use in cancer therapy.
XX PS Disclosure; Fig 7b; 101pp; English.
XX CC The sequences given in AAQ41826-61 represent sequences which are bound in
XX CC an electrophoretic mobility shift assay (EMSA) by Myc. The isolated
XX CC sequences contain the central E box core of CACGTG which binds very
XX CC weakly with Myc homo-oligomers (C1 complex), but more tightly with Myc
XX CC hetero-oligomers (C2 complex). The C2 complex requires a 26-29 kD factor
XX CC in addition to Myc. The additional factor copurifies with Myc and
XX CC resembles Max protein. A second copurifying 40-50 kD factor has been
XX CC identified (forming C2' complex). Sites selected by the C2' complex
XX CC contain the core CAGCTG which bears remarkable homology to a myogenin
XX CC binding site (see AAQ41763). Oligonucleotides containing the E box can be
XX CC used in the purification of Myc from a mammalian source. See also
XX CC AAQ41761-861. The isolated target sequences may be used in a method to
XX CC inhibit c-Myc oncoprotein activity. (Updated on 25-MAR-2003 to correct PN
XX CC field.)
XX SQ Sequence 20 BP; 13 A; 3 C; 1 G; 3 T; 0 U; 0 Other;

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XX PD 12-FEB-2003; 2003WO-US004450.
XX PF 12-FEB-2002; 2002US-0356408P.
XX PR 10-MAY-2002; 2002US-0380185P.
XX XX (CORR ) CORNELL RES FOUND INC.
XX PA (USDA ) US SEC OF AGRIC.
XX PA (UNYNE-) UNIV NEBRASKA.
XX PA (UNIV ) UNIV KANSAS STATE RES FOUND.
XX PI Collmer A, Alfano JR, Cartinhour SW, Schneider DJ, Tang X;
XX WPI; 2003-679632/64.
XX New nucleic acid molecule, useful for preparing a composition for
XX treating cancer.
XX Disclosure; SEQ ID NO 192; 284pp; English.
XX CC The invention relates to novel Pseudomonas Avr and Hop genes, a sequence
XX CC that hybridizes with these sequences under stringency conditions
XX CC comprising a hybridization medium that includes 0.9 x saline sodium
XX CC citrate (SSC) buffer at a temperature of 42 deg C. The nucleic acid
XX CC molecule is useful for preparing a composition for treating cancer. This
XX CC sequence corresponds to a PCR to isolate and amplify one of the genes of
XX CC the invention.
XX SQ Sequence 18 BP; 5 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
    Query Match 0.4%; Score 15.4; DB 1; Length 18;
    Best Local Similarity 94.1%; Pred. No. 1.9e+02;
    Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2896 GCATTTCAACCAACTCA 2912
DB 2 GCATTTCAACCAACTCA 18
RESULT 220
ABA97625/c
ID ABA97625 standard; DNA; 19 BP.
XX AC ABA97625;
XX DT 11-APR-2002 (first entry)
XX DE Probe d.
XX KW ss; fluorochrome; nucleic acid probe; fluorescence.
XX OS Unidentified.
XX PN JP2001286300-A.
XX PD 16-OCT-2001.
XX PF 20-APR-2000; 2000JP-00120097.
XX PR 20-APR-1999; 99JP-00111601.
XX PR 24-AUG-1999; 99JP-00216666.
XX PR 30-AUG-1999; 99JP-00242693.
XX PR 01-FEB-2000; 2000JP-00028896.
XX XX (BIOI-) BIOINDUSTRY KYOKAI SH.
XX PA (KANK-) KANKYO ENG KK.
XX PA (KEIZ-) KEIZAI SANGYOSHO SANGYO GIJUTSU SOGO KEN.
XX WPI; 2002-134193/18.
XX Measurement of nucleic acids, using a nucleic acid probe and analysis of

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Query Match      0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3299 GATATATTTTATTTT 3315
DB 20 GATGATTTTATTTT 4

RESULT 222
AAZ03406
ID AAZ03406 standard; DNA; 20 BP.
XX
XX AAZ03406;
XX
XX 07-OCT-1999 (first entry)
XX
XX PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
XX Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
XX paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
XX nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
XX Synthetic.
XX
XX Chlamydia trachomatis.
XX
XX WO928475-A2.
XX
XX 10-JUN-1999.
XX
XX 27-NOV-1998; 98WO-IB001939.
XX
XX 28-NOV-1997; 97FR-00015041.
XX
XX 17-DEC-1997; 97FR-00016034.
XX
XX 04-NOV-1998; 98US-0107077P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-371125/31.
XX
XX Genome sequence of Chlamydia trachomatis.
XX
XX Disclosure; Page 1604; 1755pp; English.
XX
XX PCR primers AAZ01426-206209 were used to amplify open reading frames
XX (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX be used to control growth of the microorganism. Chlamydia trachomatis is
XX responsible for a large number of diseases, e.g. eye diseases such as
XX conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX conjunctivitis; genital diseases such as nongonococcal urethritis;
XX epididymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;
XX pneumopathy in breast feeding infants, and venereal lymphogranulomatosis.
XX The polypeptides of the invention may be of use in treating these
XX diseases
XX
XX Sequence 20 BP; 9 A; 0 C; 10 G; 1 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2477 GCAGAGGTGGAGAAGA 2493
DB 3 GAAGAGGTGGAGAAGA 19

RESULT 223
AAZ040987
ID AAZ040987 standard; DNA; 20 BP.
XX
XX AAZ040987;
XX
XX 16-AUG-2000 (first entry)
XX
XX Human TNFalpha antisense oligonucleotide ISIS# 100606.
XX
XX Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;
XX tumour necrosis factor alpha; inflammatory bowel disease; diabetes;
XX rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;
XX pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
XX inflammatory disease; ss.
XX
XX Synthetic.
XX
XX WO200020645-A1.
XX
XX 13-APR-2000.
XX
XX 05-OCT-1999; 99WO-US023205.
XX
XX 05-OCT-1998; 98US-00166186.
XX
XX 18-MAY-1999; 99US-00313932.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Bennett CF, Butler MM, Shanahan WJ;
XX
XX WPI; 2000-303808/26.
XX
XX Oligonucleotide for treating diseases associated with human tumor
XX necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid
XX arthritis, comprises nucleotide sequence complementary to intron of
XX nucleic acid encoding TNF-alpha.
XX
XX Example 20; Page 95; 283pp; English.
XX
XX This sequence represents an antisense oligonucleotide sequence which
XX targets a region of the human tumor necrosis factor alpha (TNFalpha)
XX nucleotide sequence. TNFalpha is an important cytokine that plays a role
XX in host defence. It is produced mainly in macrophages and monocytes in
XX response to infection, invasion, injury or inflammation. Overexpression
XX of TNFalpha can result in disease states, particularly in infectious,
XX inflammatory and autoimmune diseases. The invention relates to antisense
XX oligonucleotides, such as that represented by the present sequence which
XX are capable of modulating the TNFalpha gene expression. The
XX oligonucleotides optionally have a phosphorothioate backbone, and may
XX also optionally contain at least one 2'-O-methoxyethyl modification. The
XX oligonucleotides are useful for modulating the expression of human
XX TNFalpha in cells and tissues, reducing a human cell inflammatory
XX response, reducing the blood glucose level in a human and treating a
XX human having a disease or condition associated with TNFalpha. Examples of
XX diseases associated with TNFalpha include diabetes, inflammatory bowel
XX disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,
XX infectious disease, hepatitis, atopic dermatitis or allograft rejection.
XX The antisense oligonucleotides are also useful for modulating the
XX function of a selected nucleic acid sequence in adipose tissue
XX
XX Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3416 TCAAGGAAGTATGGAAA 3432
DB 1 TCAAGGAAGTCTGGAAA 17

RESULT 224
AAA10948/c

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ID  AAAA10948 standard; DNA; 20 BP.
XX
AC  AAAA10948;
XX
DT  14-JUL-2000 (first entry)
XX
DE  Primer #2 for collagen Ialpha1 gene fragment amplification.
XX
KW  PCR primer; vitamin D receptor; susceptibility; bone damage;
KW  polymorphism; increased risk; osteoporosis; structural damage; fracture;
KW  break; chips; hormone therapy; prevention; collagen I-alpha-1; ss.
XX
OS  Homo sapiens.
XX
FN  WO200015839-A1.
XX
PD  23-MAR-2000.
XX
PF  10-SEP-1999; 99WO-EP007719.
XX
PR  10-SEP-1998; 98GB-00019769.
XX
PA  (UYRO-) UNIV ROTTERDAM ERASMUS.
XX
PI  Uitterlinden AG, Van Leeuwen JPTM, Pols HAP;
XX
DR  WPI; 2000-271470/23.
XX
PT  Novel methods for determining the susceptibility to bone damage by
PT  screening for polymorphisms in the vitamin D receptor gene or collagen
PT  Ialpha1 gene.
XX
PS  Example 1; Page 9; 37pp; English.
XX
CC  This sequence represents a PCR primer used to amplify intron 1 of the
CC  collagen I-alpha-1 gene. The PCR product is used in the method of the
CC  invention for determining susceptibility to bone damage. The method
CC  comprises screening for polymorphisms in the vitamin D receptor (VDR)
CC  gene or the Collagen I-alpha-1 gene. The presence of alleles A and/or
CC  T, and especially the haplotype bar, are associated with an increased
CC  risk of bone damage and a higher risk of bone fracture. The methods are
CC  used for determining the susceptibility to bone damage and osteoporosis.
CC  Bone damage may be any form of structural damage, including fractures,
CC  breaks or chips. Identification of those at risk using the method of the
CC  invention, allows for preventative measures to be taken, such as
CC  modifications to lifestyle, regular exercise, and changes in diet to
CC  strengthen bones, and hormone therapy. The present invention allows
CC  diagnosis of those at risk of developing osteoporosis, and so allows more
CC  effective preventative measures to be taken
XX
SQ  Sequence 20 BP; 2 A; 10 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2209 GCCAGGATGAGGCTGG 2225
DB 19 GCCAGGATGAGGCTGG 3

RESULT 225
AAD17705
XX AAD17705 standard; DNA; 20 BP.
XX
AC AAD17705;
XX
DT 10-DEC-2001 (first entry)
XX
DE V. parahaemolyticus trhl amplifying primer #30.
XX
KW Thermostable direct haemolysin-related haemolysin gene; trhl; trh2;
KW thermostable direct haemolysin gene; tdh2; clinical examination;
XX

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KW detection; public hygiene; food evaluation; food poisoning evaluation;
KW PCR primer; ss.
XX
OS Vibrio parahaemolyticus.
XX
FN EP1134292-A2.
XX
PD 19-SEP-2001.
XX
PF 16-MAR-2001; 2001EP-00106364.
XX
PR 17-MAR-2000; 2000JP-00081805.
PR 17-MAR-2000; 2000JP-00081806.
PR 31-MAY-2000; 2000JP-00166503.
PR 31-MAY-2000; 2000JP-00166504.
PR 31-MAY-2000; 2000JP-00166505.
XX
PA (TOYJ ) TOSOH CORP.
XX
PI Ishizuka T, Ishiguro T, Saitoh J;
XX
DR WPI; 2001-572721/65.
XX
PT New oligonucleotides as primers and probes, useful for detection or
PT amplification of Vibrio parahaemolyticus thermostable direct hemolysin-
PT related hemolysin genes or RNA derived from them.
XX
PS Disclosure; Page 31; 50pp; English.
XX
CC The invention relates to oligonucleotides used for detection or
CC amplification of a gene selected from the group consisting of Vibrio
CC parahaemolyticus direct haemolysin-related thermostable haemolysin genes
CC (trhl and trh2) and V. parahaemolyticus thermostable direct haemolysin
CC gene (tdh2) or RNA derived therefrom. These oligonucleotides are useful
CC as probe and primer for detection or amplification of V. parahaemolyticus
CC trhl, trh2 and tdh2 genes or RNA derived from the genes for clinical
CC examination, public hygiene, food evaluation or food poisoning
CC evaluation. The present sequence is a primer used to amplify V.
CC parahaemolyticus trhl
XX
SQ Sequence 20 BP; 4 A; 4 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1089 AATGTTCTTCATTTC 1105
DB 4 AATGATTCTTCATTTC 20

RESULT 226
ABQ78421/c
ID ABQ78421 standard; DNA; 20 BP.
XX
AC ABQ78421;
XX
DT 05-NOV-2002 (first entry)
XX
DE Oligonucleotide corresponding to human nucleic acids.
XX
KW Human; hereditary pancreatitis; HP; mutation; trypsinogen gene; ss.
XX
OS Homo sapiens.
XX
FN US6406846-B1.
XX
PD 18-JUN-2002.
XX
PF 14-OCT-1997; 97US-00949344.
XX
PR 14-OCT-1997; 97US-00949344.
XX

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PA (WHIT/) WHITCOMB D.
 PI Whitcomb D, Ehrlich GD, Gorry MC;
 XX
 XX WPI; 2002-581937/62.
 XX
 XX Determining susceptibility of human patient to hereditary pancreatitis
 PT comprises analyzing nucleic acid from patient for presence of mutation in
 PT third exon of cationic trypsinogen gene that indicates hereditary
 PT pancreatitis.
 XX
 XX Disclosure; Col 115; 66pp; English.
 XX
 XX The specification describes a method for determining whether a human
 CC patient is susceptible to hereditary pancreatitis (HP). The method
 CC comprises obtaining nucleic acid from the human patient and analyzing the
 CC nucleic acid to identify the presence of a single G to A transition
 CC mutation in codon 117 in a third exon of a cationic trypsinogen gene, or
 CC a single A to T transition mutation at codon 21 in second exon of a
 CC cationic trypsinogen gene, that indicates HP. The method is useful for
 CC determining whether a human patient is susceptible to HP. The present
 CC sequence represents an oligonucleotide, which is used in the course of
 CC the invention
 XX
 XX Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 2.2e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1098 TCATTTCCTCGTGAG 1114
 DB 19 TCATTTCCTCGTGGG 3
 RESULT 227
 AC05215
 ID AC05215 standard; DNA; 20 BP.
 XX
 AC AC05215;
 XX
 DT 05-AUG-2003 (first entry)
 XX
 DE Tumour necrosis factor alpha antisense oligonucleotide #218.
 XX
 KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
 KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
 KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
 KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
 KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
 KW antisense technology; ss.
 XX
 OS Synthetic.
 XX
 XX US2003022848-A1.
 PN
 XX 30-JAN-2003.
 PD
 XX
 XX 02-APR-2001; 2001US-00824322.
 PF
 XX
 XX 05-OCT-1998; 98US-00166186.
 PR
 XX 18-MAY-1999; 99US-00313932.
 XX
 PA (BAKE/) BAKER B F.
 PA (BENN/) BENNETT C F.
 PA (BUTL/) BUTLER M M.
 PA (SHAN/) SHANAHAN W R.
 XX
 XX Baker BF, Bennett CF, Butler MM, Shanahan WR;
 PI
 XX WPI; 2003-447433/42.
 DR
 XX Treating inflammatory disorders such as inflammatory bowel disease,
 PT

PT Crohn's disease or rheumatoid arthritis, in a subject, by administering
 PT oligonucleotide which inhibits expression of human tumor necrosis factor
 PT alpha.
 XX
 XX Example 22; Page 37; 142pp; English.
 PS
 XX The invention describes a method of treating an inflammatory disorder in
 CC an individual, comprising administering to the individual an
 CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
 CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
 CC method is useful for treating an inflammatory disorder such as
 CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
 CC arthritis, in an individual. The method is also useful for treating
 CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
 CC and hepatitis in an individual. This sequence represents an antisense
 CC oligonucleotide used to modulate expression of tumour necrosis factor
 CC alpha (TNF-alpha)
 XX
 XX Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 2.2e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 3416 TCACGGAAGTATGGAA 3432
 DB 1 TCACGGAAGTCTGGAA 17
 RESULT 228
 ADF60910/c
 ID ADF60910 standard; DNA; 20 BP.
 XX
 AC ADF60910;
 XX
 DT 12-FEB-2004 (first entry)
 XX
 DE Human collagen Ialpha1 PCR primer #2.
 XX
 KW Human; ss; collagen Ialpha1; SNP; single nucleotide polymorphism;
 KW osteoporosis; bone damage; serum homocysteine; folic acid; PCR; primer.
 XX
 OS Homo sapiens.
 XX
 XX US2003165928-A1.
 PN
 XX 04-SEP-2003.
 PD
 XX 11-OCT-2002; 2002US-00270714.
 PF
 XX 11-OCT-2001; 2001US-0328929P.
 PR
 XX (UITT/) UITTERLINDEN A G.
 PA (VMEU/) VAN MEURS J B J.
 XX
 XX Uitterlinden AG, Van Meurs JBJ;
 PI
 XX WPI; 2003-898055/82.
 DR
 XX Determining susceptibility to bone damage by determining polymorphisms in
 PT the methyltetrahydrofolate reductase and collagen I alpha 1 genes or
 PT serum levels of homocysteine allows preventing or reducing risk by folic
 PT acid treatment.
 XX
 XX Disclosure; SEQ ID NO 7; 25pp; English.
 PS
 XX The invention relates to new methods for determining susceptibility of a
 CC subject to bone damage comprise determining which allele(s) of
 CC polymorphisms in methyltetrahydrofolate reductase (MTHFR) and collagen
 CC Ialpha1 are present in the subject, or measuring level of serum
 CC homocysteine in the subject, where elevated level compared to a reference
 CC population indicates susceptibility. Also included are determining the
 CC susceptibility to bone damage in a subject identified as having the s

CC allele of the Spl polymorphism in collagen Ialpha1, preventing or
 CC reducing susceptibility to bone damage in a subject (comprising
 CC prescribing or administering folic acid to a subject at risk for bone
 CC damage), preventing or reducing bone damage (comprising determining that
 CC a subject as increases susceptibility to bone damage, and prescribing or
 CC administering folic acid to the subject), and predicting response of a
 CC subject to treatment (comprising determining which alleles of the MTHFR
 CC and/or collagen Ialpha1 are present). The invention is useful to prevent
 CC or reduce risk of bone damage (e.g. osteoporosis) by treating subjects
 CC determined to be susceptible with folic acid. The present sequence is a
 CC PCR primer used to amplify the polymorphic region of the human collagen
 CC Ialpha1 gene.

XX
 SQ Sequence 20 BP; 2 A; 10 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. NO. 2.2e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2209 GCCAGGATGAGGACTGG 2225
 DB 19 GCCAGGATGAGGCTGG 3

RESULT 229
 ABZ87410/C
 ID ABZ87410 standard; DNA; 20 BP.

XX
 AC ABZ87410;
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
 XX WO200285308-A2.
 XX
 PD 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.
 XX
 PF 24-APR-2001; 2001US-0286137P.
 XX
 PR (EPITG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 2652; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 6 A; 2 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. NO. 2.2e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1425 TTAGAACAACTAGAAC 1441
 DB 17 TTAGAACAACTAGAAATA 1

RESULT 230
 ABD23640/C
 ID ABD23640 standard; DNA; 20 BP.

XX
 AC ABD23640;
 DT 29-JUL-2004 (first entry)
 XX
 DE Human myosin X-derived oligonucleotide SEQ ID 2652.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.
 XX WO200285309-A2.
 XX
 PD 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.
 XX
 PF 24-APR-2001; 2001US-0286036P.
 XX
 PR (EPITG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 2652; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating

expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has anti-allergic, anti-inflammatory, anti-asthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc. tissue environment and thereby, to prevent any unwanted effects due to it

Sequence 20 BP; 6 A; 2 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1425 TTAGAACAACCTAGAAC 1441

DB 17 TTAGAACAACCTAGATA 1

RESULT 231

ADH65191
ID ADH65191 standard; DNA; 20 BP.

AC ADH65191;

DT 25-MAR-2004 (first entry)

DE Human glucocorticoid receptor-specific antisense oligonucleotide #2025.

KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

OS Homo sapiens.

XX WO2003099215-A2.

XX 04-DEC-2003.

PF 20-MAY-2003; 2003WO-US016084.

XX 20-MAY-2002; 2002US-0381857P.

XX (PHAA) PHARMACIA CORP.

PI Crosby SD, Nalseth AE;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.

PS Claim 4; SEQ ID NO 2025; 985pp; English.

CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity. The
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1323 TTCAAAGTTGCTGTC 1339

DB 4 TTCAAATGTTGCTGTC 20

RESULT 232

ADH67561/C
ID ADH67561 standard; DNA; 20 BP.

AC ADH67561;

DT 25-MAR-2004 (first entry)

DE Human glucocorticoid receptor-specific antisense oligonucleotide #4395.

KW antisense oligonucleotide; glucocorticoid receptor; infection;

KW inflammation; tumour formation; diabetes; obesity;

KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;

KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

OS Homo sapiens.

XX WO2003099215-A2.

XX 04-DEC-2003.

PF 20-MAY-2003; 2003WO-US016084.

PR 20-MAY-2002; 2002US-0381857P.

XX (PHAA) PHARMACIA CORP.

XX Crosby SD, Nalseth AE;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding

PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.

PS Claim 4; SEQ ID NO 4395; 985pp; English.

CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity. The
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX Sequence 20 BP; 13 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
QY 3300 ATATATTTTATTTT 3316
Db 20 ATATATTTTATTTT 4

RESULT 233
ADH67618/c
ID ADH67618 standard; DNA; 20 BP.
XX
XX
AC ADH67618;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4452.
XX
KW antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
PN WO2003099215-A2.
XX
PD 04-DEC-2003.
XX
PF 20-MAY-2003; 2003WO-US016084.
XX
PR 20-MAY-2002; 2002US-0381857P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Crosby SD, Nalseth AE;
XX
WPI; 2004-035034/03.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS Claim 4; SEQ ID NO 4452; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 12 A; 1 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3300 ATATATTTTATTTT 3316
Db 19 ATATATTTTATTTT 3

RESULT 234
ADK95516
ID ADK95516 standard; DNA; 20 BP.
XX
XX ADK95516;
XX
DT 06-MAY-2004 (first entry)
XX
DE Primer of the invention #1236.
```

```
XX human; single nucleotide polymorphism; SNP; ss; primer.
XX Synthetic.
XX OS JP2003259875-A.
XX PN 16-SEP-2003.
XX PD 08-MAR-2002; 2002JP-00064373.
XX PF 08-MAR-2002; 2002JP-00064373.
XX PR (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX PA WPI; 2004-093977/10.
XX DR Novel polynucleotide useful for PCR amplification along with two DNA
XX PT fragment from another set of sequences, or for detecting single
XX PT nucleotide polymorphism in human gene.
XX XX Claim 2; SEQ ID NO 4545; 2627pp; Japanese.
XX CC The present invention relates to a polynucleotide isolated from a human
XX CC gene and is useful for detecting a single nucleotide polymorphism in a
XX CC human gene or for diagnosing of disease. The invention enables the
XX CC detection of a single nucleotide polymorphism in a human gene. The
XX CC present sequence represents a primer of the invention.
XX SQ Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2101 TTGTAGCAGTTCTGTC 2117
Db 2 TTGTAGCCGTTCTGTC 18

RESULT 235
ADN06176
ID ADN06176 standard; DNA; 20 BP.
XX
XX ADN06176;
XX AC 17-JUN-2004 (first entry)
XX DT Human SPS2 specific antisense oligonucleotide, ISIS 138245.
XX DE Selenophosphate synthetase 2; SPS2; rheumatoid arthritis; infection;
XX KW inflammation; tumour; antisense therapy; human; antisense;
XX KW phosphorothioate backbone; ss.
XX
XX Homo sapiens.
XX OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "Phosphorothioate backbone in which all cytidines
XX are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl nucleotides"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-methoxyethyl nucleotides"
XX
XX US2004002151-A1.
```

XX 01-JAN-2004.
 XX 28-JUN-2002; 2002US-00186157.
 XX 28-JUN-2002; 2002US-00186157.
 XX (ISIS-) ISIS PHARM INC.
 XX Watt AT, Freier SM;
 XX WPI; 2004-070740/07.
 XX New antisense oligonucleotides for modulating selenophosphate synthetase
 PT 2 (SPS2) expression, useful for diagnosing, preventing or treating
 PT conditions associated with SPS2, e.g. rheumatoid arthritis, inflammation
 PT or tumors.
 XX Example 15; SEQ ID NO 20; 47pp; English.
 XX The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of selenophosphate synthetase 2 (SPS2). The
 CC composition comprises antisense oligonucleotides targeted to SPS2 gene.
 CC The antisense oligonucleotide is useful for modulating the expression of
 CC SPS2 in cells or tissues to treat diseases associated with their
 CC expression, e.g. rheumatoid arthritis, infections, inflammation or
 CC tumors. It is also used for diagnostics, prophylaxis, or as research
 CC reagents or kits. The antisense oligonucleotide is useful in antisense
 CC therapy. The present sequence is an antisense oligonucleotide targeted to
 CC human SPS2 DNA. This sequence is used in the exemplification of the
 CC invention.
 XX SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 2.2e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 194 GCAGCCTCAGCCCTTCA 210
 DB 2 GCAGCCTCAGCCCTTCA 18
 RESULT 236
 ADP88421/c
 ID ADP88421 standard; DNA; 20 BP.
 AC ADP88421;
 XX 09-SEP-2004 (first entry)
 XX Human telomerase antisense sequence related oligonucleotide #5.
 DE cytostatic; cancer; antisense; human telomerase; cell proliferation;
 XX apoptosis; ss.
 KW Homo sapiens.
 OS WO2004053116-A2.
 PN 24-JUN-2004.
 XX 08-DEC-2003; 2003WO-DE004114.
 XX 06-DEC-2002; 2002DE-01058117.
 PR 07-FEB-2003; 2003DE-01006084.
 XX (UYDR) UNIV DRESDEN TECH.
 PA Schwenzer B, Schmidt U, Wirth MP, Kraemer K, Fuessel S, Meyer A;
 PI WPI; 2004-468865/44.
 DR 2004-468865/44.
 XX

PT New polynucleotide directed against the gene for telomerase catalytic
 PT subunit, useful for diagnosis and treatment of solid tumors and leukemia,
 PT interacts with specific regions of the mRNA.
 XX Example 2; Page 26; 40pp; German.
 XX The present invention relates to a polynucleotide, directed against a
 CC gene that encodes a catalytic subunit of human telomerase, which
 CC interacts with the mRNA of the catalytic subunit of telomerase in at
 CC least two target sequence regions, i.e. 2176-2250 and 2296-2392 of the
 CC sequence AF015950. The polynucleotides are used for diagnosis,
 CC prophylaxis, treatment, monitoring (of progression or therapy) and/or
 CC secondary treatment of diseases associated with growth, differentiation
 CC and/or division of cells, especially a very wide range of solid cancers
 CC and leukemias, or their metastases, e.g. cancers of the urogenital or
 CC gastrointestinal tracts, liver, breast, prostate and bladder. They can
 CC also be used to inhibit vitality or proliferation rates of cells, to
 CC induce apoptosis and/or cause cell-cycle arrest. The present sequence is
 CC an oligonucleotide used in the exemplification of the invention.
 XX SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 2.2e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 468 AGCCACCTCTCTACCTT 484
 DB 17 AGCCACCTCTCTACCTT 1
 RESULT 237
 ADP68897
 ID ADP68897 standard; DNA; 20 BP.
 XX ADP68897;
 XX 09-SEP-2004 (first entry)
 XX Human DRK2 antisense oligonucleotide ISIS182454.
 DE Human; ss; antisense; DRK2;
 KW death-associated protein kinase-rel. apoptosis-inducing protein kinase;
 KW serine/threonine kinase 17B; STK17B; apoptosis; degenerative disorder;
 KW neurological disorder; Alzheimer's disease; Parkinson's disease;
 KW Amyotrophic lateral sclerosis; ALS; retinitis pigmentosa;
 KW blood cell disorder; cancer; autoimmune disorder; viral infection;
 KW gene therapy; hyperproliferative disorder; chromosome 2.
 XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone and all cytidines are 5
 FT -methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residue"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residue"
 XX US2004115645-A1.
 XX 17-JUN-2004.
 XX 12-DEC-2002; 2002US-00318819.
 XX 12-DEC-2002; 2002US-00318819.

```

XX (ISIS-) ISIS PHARM INC.
PA
PA
PI Bennett CF, Dobie KW;
XX
XX WPI; 2004-449384/42.
XX
XX New oligonucleotide compound that inhibits expression of DRK2, useful
PT for preparing a composition for treating hyperproliferative disorder,
PT e.g., cancer.
XX
XX Example 15; SEQ ID NO 43; 87pp; English.
XX
XX The invention relates to a new compound (e.g. an antisense
CC oligonucleotide), having a sequence comprising 8-80 bp targeted to a
CC nucleic acid encoding DRK2 (death-associated protein kinase-related
CC apoptosis-inducing protein kinase 2, also known as serine/threonine
CC kinase 17B, STK17B), specifically hybridises with the nucleic acid
CC encoding DRK2 (appearing as ADP6859 and representing bases 58695-149492
CC of human chromosome 2) and inhibits expression of DRK2. Also included
CC are inhibiting the expression of DRK2 in cells or tissues, screening for
CC a modulator of DRK2, a diagnostic method for identifying a disease
CC state, a kit or assay device comprising the compound and treating an
CC animal having a disease or condition associated with DRK2. The
CC oligonucleotide compound is useful for preparing a composition for
CC treating hyperproliferative disorders, degenerative disorders,
CC neurological disorders, Alzheimer's disease, Parkinson's disease,
CC Amyotrophic lateral sclerosis (ALS), retinitis pigmentosa, blood cell
CC disorders, cancer, autoimmune disorders and viral infection. The present
CC sequence represents an antisense oligonucleotide targeting DRK2.
XX
XX Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2897 CATTTCACCACTCAG 2913
Db 1 CATTTCAGCCAACTCAG 17
RESULT 238
ADQ29297
ID ADQ29297 standard; DNA; 20 BP.
XX
XX ADQ29297;
XX
XX 07-OCT-2004 (first entry)
XX
XX Human TNF alpha antisense oligonucleotide seqid 228.
XX
XX antimicrobial; antidiabetic; antirheumatic; antiarthritic;
KW gastrointestinal; antiinflammatory; neuroprotective; dermatological;
KW viricide; hepatotropic; human; TNF-alpha; tumour necrosis factor alpha;
KW survivin; TNF-alpha associated disorder; infection; diabetes;
KW rheumatoid arthritis; Crohn's disease; pancreatitis; multiple sclerosis;
KW atopic dermatitis; hepatitis; antisense oligonucleotide;
KW antisense technology; ss.
XX
XX Homo sapiens.
XX
XX US2004142346-A1.
XX
XX 22-JUL-2004.
XX
XX 29-AUG-2003; 2003US-00652795.
XX
XX 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
PR 02-APR-2001; 2001US-00824322.
XX
XX (BAKE/) BAKER B F.
PA
(ISIS-) ISIS PHARM INC.
PA
PA
PI Bennett CF, Dobie KW;
XX
XX WPI; 2004-449384/42.
XX
XX New oligonucleotide compound that inhibits expression of DRK2, useful
PT for preparing a composition for treating hyperproliferative disorder,
PT e.g., cancer.
XX
XX Example 15; SEQ ID NO 43; 87pp; English.
XX
XX The invention relates to a new compound (e.g. an antisense
CC oligonucleotide), having a sequence comprising 8-80 bp targeted to a
CC nucleic acid encoding DRK2 (death-associated protein kinase-related
CC apoptosis-inducing protein kinase 2, also known as serine/threonine
CC kinase 17B, STK17B), specifically hybridises with the nucleic acid
CC encoding DRK2 (appearing as ADP6859 and representing bases 58695-149492
CC of human chromosome 2) and inhibits expression of DRK2. Also included
CC are inhibiting the expression of DRK2 in cells or tissues, screening for
CC a modulator of DRK2, a diagnostic method for identifying a disease
CC state, a kit or assay device comprising the compound and treating an
CC animal having a disease or condition associated with DRK2. The
CC oligonucleotide compound is useful for preparing a composition for
CC treating hyperproliferative disorders, degenerative disorders,
CC neurological disorders, Alzheimer's disease, Parkinson's disease,
CC Amyotrophic lateral sclerosis (ALS), retinitis pigmentosa, blood cell
CC disorders, cancer, autoimmune disorders and viral infection. The present
CC sequence represents an antisense oligonucleotide targeting DRK2.
XX
XX Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2897 CATTTCACCACTCAG 2913
Db 1 CATTTCAGCCAACTCAG 17
RESULT 239
ADQ29297
ID ADQ29297 standard; DNA; 20 BP.
XX
XX ADQ29297;
XX
XX 21-OCT-2004 (first entry)
XX
XX Antisense oligonucleotide targeting human TNFalpha ISIS100606.
XX
XX Human; tumour necrosis factor alpha; TNFalpha; ss;
KW antisense gene therapy; inflammatory disorder; phosphorothioate linkage;
KW methylene(methylimino) intersugar linkage; infection; autoimmune disease;
KW diabetes; rheumatoid arthritis; Crohn's disease; pancreatitis;
KW multiple sclerosis; atopic dermatitis; inflammatory bowel disease;
KW colitis; hepatitis.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate linkages"
XX
XX US2004152652-A1.
XX
XX 05-AUG-2004.
XX
XX 26-AUG-2003; 2003US-00647918.
XX
XX 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
PR

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```
PR 02-APR-2001; 2001US-00824322.
XX (BAKE/) BAKER B F.
XX PA (BENN/) BENNETT C F.
XX PA (BUTL/) BUTLER M M.
XX PA (SHAN/) SHANAHAN W R.
XX
XX Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX WPI; 2004-580193/56.
XX
XX Treating inflammatory disorders, such as diabetes, rheumatoid arthritis
XX PT and multiple sclerosis, using antisense oligonucleotides targeted to
XX PT nucleic acids encoding human tumor necrosis factor-alpha (TNF-alpha).
XX
XX Example 22; SEQ ID NO 228; 145pp; English.
XX
XX The invention relates to treating an inflammatory disorder in an
XX CC individual comprising administering an oligonucleotide (an antisense
XX CC oligonucleotide) up to 30 nucleotides in length complementary to a
XX CC nucleic acid molecule encoding human tumor necrosis factor-alpha (TNF-
XX CC alpha). The oligonucleotide useful in treating an inflammatory disorder
XX CC inhibits the expression of the human tumor necrosis factor-alpha, and
XX CC comprises at least an 8 nucleobase portion of any of 50 20-21 base pair
XX CC sequences, given in the specification. The antisense oligonucleotide is
XX CC administered orally, topically or parenterally. The oligonucleotide
XX CC comprises at least one modified intersugar linkage. The intersugar
XX CC linkage is a phosphorothioate linkage. The oligonucleotide further
XX CC comprises at least one 2'-O-methoxyethyl modification and at least one 5-
XX CC methyl cytidine, where every 2'-O-methoxyethyl modified cytidine residue
XX CC is a 5-methyl cytidine, and where every cytidine residue is a 5-methyl
XX CC cytidine. The modified intersugar linkage is a methylene(methylimino)
XX CC intersugar linkage. The methods and compositions of the present invention
XX CC are useful for the diagnosis, prevention and/or treatment of diseases or
XX CC conditions associated with aberrant expression or activity of the TNF-
XX CC alpha, such as inflammatory, infectious and autoimmune diseases,
XX CC including diabetes, rheumatoid arthritis, Crohn's disease, pancreatitis,
XX CC multiple sclerosis, atopic dermatitis, inflammatory bowel disease,
XX CC colitis and hepatitis. The present sequence is an antisense
XX CC oligonucleotide targeting the human TNFalpha gene.
XX
XX Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3416 TCAAGGAAGTATGGAAA 3432
DB 1 TCAAGGAAGTCTGGAAA 17

RESULT 240
ADR67866
ID ADR67866 standard; DNA; 20 BP.
XX
XX ADR67866;
XX
XX 18-NOV-2004 (first entry)
XX
XX Prostaglandin E2 EP3 III reverse primer.
XX
XX ss; prostaglandin E2 EP3 III; hematological disease;
XX KW cardiovascular disease; urological disease; metabolic disease;
XX KW endocrinological disease; gastroenterological disease; cancer;
XX KW respiratory disease; regulator; primer.
XX
XX Homo sapiens.
XX OS Synthetic.
XX
XX WO2004074830-A2.
XX
XX 02-SEP-2004.
```

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XX 10-FEB-2004; 2004WO-EP001196.
XX
XX 24-FEB-2003; 2003EP-00003253.
XX
XX (FARB ) BAYER HEALTHCARE AG.
XX
XX Golz S, Brueggemeier U, Summer H;
XX WPI; 2004-653028/53.
XX
XX Screening agents for treating, e.g., cancer by detecting binding of a
XX PT compound to prostaglandin E2 EP3 III protein or polynucleotide,
XX PT determining activity of E2 EP3 III in presence of regulator and/or
XX PT compound at varying concentrations.
XX
XX Example 2; SEQ ID NO 4; 130pp; English.
XX
XX This sequence represents a primer which was used in the quantitation of
XX CC the distribution of prostaglandin E2 EP3 III polypeptide. The
XX CC prostaglandin E2 EP3 III polypeptide and corresponding nucleic acid may
XX CC be used for screening therapeutic agents for treating disease such as
XX CC hematological diseases, cardiovascular diseases, urological diseases,
XX CC metabolic diseases, endocrinological diseases, gastroenterological
XX CC diseases, cancer, or respiratory diseases in a mammal. The methods
XX CC comprise detecting binding of a test compound to a prostaglandin E2 EP3
XX CC III polypeptide or polynucleotide; determining activity of prostaglandin
XX CC E2 EP3 III polypeptide at different concentrations of test compound; or
XX CC determining activity of prostaglandin E2 EP3 III polypeptide in the
XX CC presence of a regulator of prostaglandin E2 EP3 III polypeptide. The
XX CC regulators of prostaglandin E2 EP3 III are useful for preparing a
XX CC pharmaceutical composition for treating disease such as hematological
XX CC diseases, cardiovascular disease, urological diseases, metabolic
XX CC diseases, endocrinological diseases, gastroenterological diseases,
XX CC cancer, or respiratory diseases in a mammal. They are also useful for the
XX CC regulation of prostaglandin E2 EP3 III activity in a mammal having the
XX CC disease.
XX
XX Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
SQ Query Match 0.4%; Score 15.4; DB 1; Length 20;
Best Local Similarity 94.1%; Pred. No. 2.2e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2834 TCAAGGAGCTTCCAGTG 2850
DB 1 TCATGGAGCTTCCAGTG 17

RESULT 241
AAQ21516/c
ID AAQ21516 standard; DNA; 20 BP.
XX
XX AAQ21516;
XX
XX 25-MAR-2003 (revised)
XX DT 01-JUN-1992 (first entry)
XX
XX Mutant primer for amplifying exon 4 of CTP synthetase gene.
XX
XX MDR; chemotherapy; PCR; cytosine triphosphate synthetase; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX FT misc_difference 20
XX FT /*tag= a
XX FT /note= "mutation"
XX
XX WO9201811-A.
XX
XX 06-FEB-1992.
```

PF 25-JUL-1990; 90GB-00016287.
XX
PR 25-JUL-1990; 90GB-00016287.
PR 11-APR-1991; 91US-00682975.
XX
XX (IMCR) IMPERIAL CANCER RES TECHNOLOGY.
XX
PI Meuth M;
XX
DR WPI; 1992-064967/08.
XX
XX Assay method for CTP synthetase mutation(s) - utilising polymerase chain
PT reaction to reveal the presence of the multiple drug resistance phenotype
PT indicative of a mutation.
XX
XX Example 2; Page 33; 46pp; English.
XX
CC DNA or RNA was purified from white blood cells of patients with acute
CC leukaemia or solid tumour cells; the RNA was reverse transcribed into
CC cDNA. The downstream primer (AAQ21515) was used together with this primer
CC which has a mutant-specific nucleotide at its 3' end to amplify a region
CC of exon 4 of the CTP synthetase gene. A specific signal will only be seen
CC with samples contg. the mutant gene. See AAQ21488 and AAQ21512 for
CC upstream primers which can be used with other primers specific for
CC mutations in exon 4. (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. NO. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1185 AAATTGGACAGTTTCCAC 1204
DB 20 AAATTGGACAGTTTCCAC 1
||| ||||| ||||| |||

RESULT 242
AAQ53908/C
ID AAQ53908 standard; DNA; 20 BP.
XX
AC AAQ53908;
XX
DT 25-MAR-2003 (revised)
DT 22-JUN-1994 (first entry)
XX
DE Primer for preparing probe for N-heparan sulphate sulphotransferase.
XX
KW N-heparan sulphate-N-deacetylase-N-sulphotransferase; heparan; heparin;
KW blood clotting; glycosaminoglycan; proteoglycans; neoplastic disease;
KW viral infection; ss.
XX
OS Synthetic.
XX
PN WO9325659-A1.
XX
PD 23-DEC-1993.
XX
PF 07-JUN-1993; 93WO-US005412.
XX
PR 16-JUN-1992; 92US-00899423.
PR 30-APR-1993; 93US-00057167.
XX
XX (UYMA-) UNIV MASSACHUSETTS MEDICAL CENT.
PA (GLYC-) GLYCOMED INC.
XX
XX Hirschberg CB, Orellana A, Hashimoto Y, Swiedler S, Wei Z;
PI Ishihara M;
XX
XX WPI; 1994-007517/01.
XX
XX DNA encoding cpds. which catalyse de-acetylation - and sulphation of
PT glycosamino-glycan(s), used to develop agonists or antagonists for use in

PT therapy.
XX
PS Disclosure; Page 23; 72pp; English.
XX
CC N-heparan sulphate sulphotransferase can catalyse the deacetylation and
CC sulphation of a glycosaminoglycan (GAG), namely heparan sulphate. It can
CC be used for treating conditions in which the stimulation or inhibition of
CC the deacetylation and or sulphation of heparan is desirable, such as
CC blood clotting disorders, neoplastic conditions and viral infection. The
CC enzyme can also be used to produce highly modified and therefore highly
CC active sulphated proteoglycans for use in therapy. This primer was used
CC to amplify a subclone of the enzyme coding sequence to produce a probe.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 0 A; 4 C; 7 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. NO. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1840 CCATAAACAGAACTACAG 1859
DB 20 CCAGAAAACAGGCCACACAG 1
||| ||||| ||||| |||||

RESULT 243
AAQ71950
ID AAQ71950 standard; DNA; 20 BP.
XX
AC AAQ71950;
XX
DT 25-MAR-2003 (revised)
DT 03-MAY-1995 (first entry)
XX
DE Human IL-2R gamma gene exon 4 seq 2 primer.
XX
KW IL2-R gamma gene; X-linked severe combined immunodeficiency; XSCID;
KW interleukin; ss.
XX
OS Homo sapiens.
XX
PN WO9420641-A1.
XX
PD 15-SEP-1994.
XX
PF 10-MAR-1994; 94WO-US002891.
XX
PR 12-MAR-1993; 93US-00031143.
PR 14-SEP-1993; 93US-00121435.
XX
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Leonard WJ, Noguchi M, McBride WO;
XX
XX WPI; 1994-303046/37.
XX
PT Diagnosis of X-linked severe combined immunodeficiency (XSCID) -
PT comprises detecting mutated IL-2R gamma gene, also vectors and transgenic
PT animals containing the mutated gene.
XX
PS Claim 12; Page 88; 98pp; English.
XX
CC AAQ71911 to AAQ71975 are primers for the human IL-2R gamma gene, these
CC were used to amplify DNA from mutated and normal IL-2R gamma genes. The
CC mutated gene DNA was obtained either from female carriers or male
CC sufferers of X-linked severe combined immunodeficiency (XSCID). The
CC amplified DNA from normal and affected individuals was then compared
CC using a variety of methods including northern blotting and dot and slot
CC hybridisation. From this a claimed method for the diagnosis of XSCID
CC carriers and sufferers was developed. (Updated on 25-MAR-2003 to correct
CC PN field.)
XX
SQ Sequence 20 BP; 4 A; 4 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 2093 AGTAATCTGTTAGACGATTC 2112
DB 1 AGAATCTGTTGTTCCAGTTC 20

RESULT 244

AAQ95706
ID AAQ95706 standard; DNA; 20 BP.

XX AC AAQ95706;
XX DT 15-FEB-1996 (first entry)
XX DE Primer A (Group 7, set C) for marker D15S118, chromosome 15.
XX KW primer; polymerase chain reaction; PCR; linkage study; locus;
XX KW microsatellite marker sequence; automated genotyping; allele;
XX KW polymorphism; detection; Homo sapiens; ss.

OS Synthetic.

XX WO9515400-A1.

XX PD 08-JUN-1995.

XX PF 05-DEC-1994; 94WO-US013945.

XX PR 03-DEC-1993; 93US-00160837.

XX PA (UYJO) UNIV JOHNS HOPKINS.

XX PI Levitt RC;

XX DR WPI; 1995-215278/28.

XX PT Kit for automated genotyping contg. pairs of PCR primers - designed to
PT amplify polymorphic nucleotide repeat sequences, arranged in sets each
PT with a characteristic fluorescence label, useful e.g. in detection of
PT disease related genetic rearrangement.

XX PS Disclosure; Fig 7G-2; 104pp; English.

XX CC The method aims to provide a collection of highly reproducible
CC microsatellite marker sequences (MMS) at approx. 10-50 cM intervals
CC throughout the human genome which can be detectably labelled. The MMS are
CC polymorphic, simple sequence repeats and can be used in automated
CC genotyping. esp. fluorescence-based. The primers correspond to the unique
CC DNA sequence surrounding each marker, and PCR is used to detect each
CC polymorphism. When the MMS show considerable polymorphism (ie. a
CC difference in the number of repeats) between individuals, the markers can
CC be particularly informative. The MMS can be ideal for linkage studies.
CC Kits comprise at least 4 groups, of at least 3 sets, each comprising
CC labelled primers for PCR amplification of the DNA. Group 7 primer pairs
CC are shown in AAQ95687-734. The published size range of the D15S118 allele
CC is 218-230 bp, and the degree of heterozygosity in the population is
CC about 76%

XX SQ Sequence 20 BP; 9 A; 7 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 3389 TCAATATCCATATTAAACA 3408
DB 1 TCAAGACCCATATCAACA 20

RESULT 245

AAAT47265/c

ID AAT47265 standard; RNA; 20 BP.

XX AC AAT47265;

XX DT 27-AUG-1997 (first entry)

XX DE 5' fragment #2 of alfalfa mosaic virus.

XX KW Capped RNA molecule; mRNA maturation; translation initiation; influenza;
XX KW endonuclease aptamer; RNase; therapy; inhibitor; ss.

OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 1 /*tag= a

FT /mod_base= 7-methylguanosine

FT modified_base 2 /*tag= b

FT /mod_base= triphosphorylated

FT modified_base 3 /*tag= c

FT /mod_base= 2'-O-methyluridine

XX WO9640159-A1.

XX PD 19-DEC-1996.

XX PF 03-JUN-1996; 96WO-US008394.

XX PR 07-JUN-1995; 95US-00480068.

XX PA (MERI) MERCK & CO INC.

XX PI Benseler F, Cole JL, Kuo LC, Olsen DB;

XX DR WPI; 1997-051868/05.

XX PT Production of capped RNA or analogues - useful as substrates for
PT influenza virus associated virally encoded endonuclease.

XX PS Claim 18; Page 12; 39pp; English.

XX CC AAT47264-T47280 represent capped RNA molecules produced by the method of
CC the invention. The method of the invention is for producing capped RNA or
CC RNA analogues. The method comprises reacting a RNA or analogue
CC oligonucleotide with a phosphate addition agent to form a RNA or analogue
CC mono-, di- or triphosphate, which is then capped. The presence of the cap
CC is important for mRNA maturation, initiation of translation, and protects
CC the mRNA against various RNases present in the cell. The capped RNA or
CC analogue is an influenza endonuclease aptamer, useful for treating or
CC preventing an influenza infection in an animal. The synthetic capped RNA
CC are substrates for virally encoded endonuclease associated with influenza
CC virus. The short non-extendible (due to their length or because of the
CC modification of the 3' end of the oligo) RNA molecules are potent
CC inhibitors of the cleavage of capped RNA by influenza endonuclease. They
CC may be used to investigate viral and cellular mechanisms of
CC transcription/translation, or mRNA maturation

XX SQ Sequence 20 BP; 3 A; 1 C; 2 G; 0 T; 14 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 2683 GAAGGGAATAATAAAACC 2702
DB 20 GAAATTAATAATAAAACC 1

RESULT 246

```

AAT89739
ID AAT89739 standard; DNA; 20 BP.
XX
AC AAT89739;
XX
DT 05-FEB-1998 (first entry)
XX
DE PCR primer used for hepatitis C virus genotyping.
XX
KW Hepatitis C virus; HCV; genotype determination; 1a; 1b; 2a; 2b; 3a; 3b;
KW 4; 5a; 6a; 6b; diagnosis; amplification; PCR; primer; ss.
XX
OS Synthetic.
OS Hepatitis C virus.
XX
PN JP09234072-A.
XX
PD 09-SEP-1997.
XX
PF 01-FEB-1996; 96JP-00038875.
XX
PR 01-FEB-1995; 95JP-00035997.
PR 30-DEC-1995; 95JP-00352511.
XX
PA (SRLS-) SRL KK.
XX
DR WPI; 1997-497313/46.
XX
PT Primers used for determining hepatitis C virus genotype - provide a rapid
PT and accurate method of hepatitis C virus genotyping.
XX
PS Claim 51; Page 18; 33pp; Japanese.
XX
CC AAT89689-T89744 are individually claimed oligonucleotides used as PCR
CC (polymerase chain reaction) primers for the discrimination of the
CC genotype of hepatitis C virus (HCV). Classification of the genotype of
CC HCV can be achieved precisely and simply according to the International
CC Standardisation of Classification. The primers can be used to distinguish
CC between HCV genotypes 1a, 1b, 2a, 2b, 3a, 3b, 4, 5a, 6a and 6b
XX
SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3762 CAGATGGCTGGGATCCCTCC 3781
Db 1 CACGTGGCTGGGATCGCTCC 20

RESULT 247
AAV59158
ID AAV59158 standard; DNA; 20 BP.
XX
AC AAV59158;
XX
DT 14-DEC-1998 (first entry)
XX
DE p53 sense primer.
XX
DE ss; PCR; primer; amplification; mutant allele; carrier; cancer.
XX
KW Synthetic.
XX
PN WO9839472-A2.
XX
PD 11-SEP-1998.
XX
PF 04-MAR-1998; 98WO-DE000676.
XX
PR 04-MAR-1997; 97DE-01008758.
XX

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```

PA (WAGE/) WAGENER C.
XX
PI Wagener C;
XX
DR WPI; 1998-495865/42.
XX
PT Detecting mutated alleles in presence of excess wild-type allele - by
PT separation of wild-type on support carrying specific oligonucleotides,
PT used to detect mutation(s), particularly for cancer diagnosis.
XX
PS Example 2; Page 10; 17pp; German.
XX
CC The primers AAV59158-V59159 were used to detect a point mutation in a p53
CC gene as an example of the method of the invention to Detect mutant
CC alleles among an excess of wild-type alleles. This is carried out by
CC separating the wild type alleles using a carrier on which are bound one
CC or more oligonucleotides complementary to the wild type. The method is
CC used to detect mutants having one or more point mutations, deletions,
CC inversions, insertions and/or substitutions of small or large genetic
CC regions, particularly to detect genetic abnormalities for cancer
CC diagnosis. The method can detect cancer cells in faeces, sputum,
CC bronchial lavage, urine or tissue biopsies. Rare alleles can be detected,
CC making the method suitable for detecting heterozygous or homozygous
CC mutations or polymorphisms of any origin
XX
SQ Sequence 20 BP; 2 A; 8 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3173 TTTTAAGTCTGTCCTTAC 3192
Db 1 TTTCAACTCTGTCCTTCC 20

RESULT 248
AAZ02662/c
ID AAZ02662 standard; DNA; 20 BP.
XX
AC AAZ02662;
XX
DT 07-OCT-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS Synthetic.
OS Chlamydia trachomatis.
XX
PN WO9928475-A2.
XX
PD 10-JUN-1999.
XX
PF 27-NOV-1998; 98WO-IB001939.
XX
PR 28-NOV-1997; 97FR-00015041.
PR 17-DEC-1997; 97FR-00016034.
PR 04-NOV-1998; 98US-0107077P.
XX
PA (GEST ) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-371125/31.
XX
PT Genome sequence of Chlamydia trachomatis.
XX
PS Disclosure; Page 1543; 1755pp; English.

```

XX PCR primers AA201426-206209 were used to amplify open reading frames
CC (ORFs) of the genome of Chlamydia trachomatis (see AA201425). These ORFs
CC encode polypeptides (see AA316754-Y37949) which can be used as vaccines
CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC be used to control growth of the microorganism. Chlamydia trachomatis is
CC responsible for a large number of diseases, e.g. eye diseases such as
CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
CC conjunctivitis; genital diseases such as nongonococcal urethritis;
CC epididymitis, cervicitis, salpingitis, perihepatitis, Bartholinitis;
CC pneumopathy in breast feeding infants, and venereal lymphogranulomatosis.
CC The polypeptides of the invention may be of use in treating these
CC diseases
XX
XX Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 3186 TCCTTACAGAGGTTAAAGTC 3205
XX ID 20 TTCTTCCAGAGGTTAAAGGC 1
XX AC AAX92717;
XX
XX DT 13-SEP-1999 (first entry)
XX DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX neutralising epitope; PCR primer; ss.
XX
XX OS Synthetic.
XX Chlamydophila pneumoniae.
XX
XX PN WO9927105-A2.
XX PD 03-JUN-1999.
XX
XX PF 20-NOV-1998; 98WO-IB001890.
XX
XX PR 21-NOV-1997; 97FR-00014673.
XX 04-NOV-1998; 98US-0107078P.
XX
XX (GEST) GENSET.
XX
XX PA Griffais R;
XX
XX PI WPI; 1999-357842/30.
XX
XX DR Genome sequence of Chlamydia pneumoniae.
XX
XX PT Page 1533; Disclosure; 1912pp; English.
XX
XX PS AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAX34584-AAX35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotides sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae

SQ Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1617 GAAAACTTCCTTCAGATAT 1636
XX ID 20 GAAAACTTCCTTCAGATAT 1
XX DB
XX
XX RESULT 250
XX AAA61979/c
XX ID AAA61979 standard; DNA; 20 BP.
XX
XX AC AAA61979;
XX
XX DT 20-NOV-2000 (first entry)
XX DE Human MEK5 phosphothioate antisense oligonucleotide, SEQ ID NO:31.
XX
XX KW Human MEK5; mitogen-activated protein kinase kinase kinase 5;
XX MEK kinase 5; MAP/ERK kinase kinase 5; ASK1; pro-apoptotic;
XX apoptosis signal-regulating kinase 1; programmed cell death;
XX serine/threonine kinase; MAP kinase cascade; JNK/SAPK module;
XX Jun N-terminal kinase/stress-activated protein kinase; p38 module; MKK3;
XX SEK1; transcription factor modulation; expression inhibition; antisense;
XX inflammation; wound healing disorder; phosphothioate; ss.
XX
XX OS Homo sapiens.
XX
XX PN US6080546-A.
XX PD 27-JUN-2000.
XX
XX PF 23-JUL-1999; 99US-00359757.
XX
XX PR 23-JUL-1999; 99US-00359757.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX PI Monia BP, Cowbert LM, Gaarde W;
XX
XX DR WPI; 2000-464034/40.
XX
XX PT Antisense compounds useful for treating or preventing infection,
XX inflammation or tumor formation by inhibiting expression of human MEK5.
XX
XX PS Claim 3; Col 39; 35pp; English.
XX
XX CC Sequences AAA61956-A61995 represent phosphothioate antisense
XX oligonucleotides targeted to the human MEK5 gene, which inhibit its
XX expression. The antisense oligonucleotides were designed to target
XX different regions of the human MEK5 RNA, and were analysed for their
XX effect on MEK5 mRNA levels by quantitative real-time PCR. MEK5 (also
XX known as mitogen-activated protein kinase kinase kinase 5, MEK kinase 5,
XX MAP/ERK kinase kinase 5, apoptosis signal-regulating kinase 1, and ASK1)
XX is a dual-specific serine/threonine kinase which mediates cellular
XX responses to mitogenic stimuli by activating both the JNK/SAPK (Jun N-
XX terminal kinase/stress-activated protein kinase) and p38 modules of MAP
XX kinase cascades. MEK5 is thought to play a critical role in the
XX regulation of apoptosis (programmed cell death) by interacting with other
XX proteins in this cascade and by phosphorylating downstream targets such
XX as MKK3 and SEK1. MEK5 also participates in another apoptosis-related
XX signalling cascade involving the modulation of transcription factors.
XX Activation and dimerisation of MEK5 is induced by tumour necrosis factor
XX -alpha (TNF-alpha), these processes being mediated by reactive oxygen
XX species. Thioedoxin is able to associate with MEK5 and inhibit MEK5
XX kinase activity and hence MEK5-dependent apoptosis. The oligonucleotides
XX of the invention are useful for diagnosis, prevention and treatment of
XX conditions associated with MEK5 expression, such as inflammation and
XX wound healing disorders

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SQ Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2236 ACCTAGTAAAGAAATTAGAA 2255
    ||||| ||||| ||||| |||||
DB 20 AGCTGGTAGAGACTTAGAA 1

RESULT 251
AAF32931
ID AAF32931 standard; DNA; 20 BP.
XX
AC AAF32931;
XX
DT 23-MAR-2001 (first entry)
XX
DE Human B7-1 antisense oligonucleotide SEQ ID NO: 128.
XX
KW Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
KW autoimmune disorder; phosphorothioate backbone; ss.
XX
OS Homo sapiens.
XX
PN WO200074687-A1.
XX
PD 14-DEC-2000.
XX
PF 25-MAY-2000; 2000WO-US014471.
XX
PR 04-JUN-1999; 99US-00326186.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Vickers TA, Karras JG;
XX
DR WPI; 2001-049991/06.
XX
PT Novel compound for diagnosing, preventing and treating immune disorders,
PT comprising an oligonucleotide that specifically hybridizes with a nucleic
PT acid sequence encoding B7 protein.
XX
PS Example 12; Page 75; 162pp; English.
XX
CC The present invention provides sequences of antisense oligonucleotides
CC targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
CC The antisense sequences have phosphorothioate backbones and some
CC nucleotides are 2'-methoxyethoxy residues. The sequences can be used in
CC the treatment of inflammatory and autoimmune disorders, including asthma,
CC juvenile diabetes mellitus, myasthenia gravis, Graves' disease,
CC rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
CC multiple sclerosis, psoriasis, systemic lupus erythematosus, contact
CC dermatitis, rhinitis, allergies and cancer
XX
SQ Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1317 TTGAGTTTCAAGGTTGCTG 1336
    ||||| ||||| ||||| |||||
DB 1 TTTAGTTTCACAGCTTGCTG 20

RESULT 252
AAF33171/c
ID AAF33171 standard; DNA; 20 BP.
XX
AC AAF33171;
XX
```

```
DT 23-MAR-2001 (first entry)
XX
DE Human B7-1 antisense oligonucleotide SEQ ID NO: 254.
XX
KW Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
KW autoimmune disorder; phosphorothioate backbone; ss.
XX
OS Homo sapiens.
XX
PN WO200074687-A1.
XX
PD 14-DEC-2000.
XX
PF 25-MAY-2000; 2000WO-US014471.
XX
PR 04-JUN-1999; 99US-00326186.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Vickers TA, Karras JG;
XX
DR WPI; 2001-049991/06.
XX
PT Novel compound for diagnosing, preventing and treating immune disorders,
PT comprising an oligonucleotide that specifically hybridizes with a nucleic
PT acid sequence encoding B7 protein.
XX
PS Example 19; Page 98; 162pp; English.
XX
CC The present invention provides sequences of antisense oligonucleotides
CC targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
CC The antisense sequences have phosphorothioate backbones and some
CC nucleotides are 2'-methoxyethoxy residues. The sequences can be used in
CC the treatment of inflammatory and autoimmune disorders, including asthma,
CC juvenile diabetes mellitus, myasthenia gravis, Graves' disease,
CC rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
CC multiple sclerosis, psoriasis, systemic lupus erythematosus, contact
CC dermatitis, rhinitis, allergies and cancer
XX
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3767 GCCTGGATCCCTCCCTGT 3786
    ||||| ||||| ||||| |||||
DB 20 GCCTGGATCCCTCTCCTTT 1

RESULT 253
AAF60191
ID AAF60191 standard; DNA; 20 BP.
XX
AC AAF60191;
XX
DT 27-APR-2001 (first entry)
XX
DE Human ATM gene exon 40 reverse primer.
XX
KW Human; ATM; ataxia telangiectasia; mutation detection;
KW single-stranded conformation polymorphism; SSCP; electrophoresis;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200107660-A1.
XX
PD 01-FEB-2001.
XX
PF 21-JUL-2000; 2000WO-US020011.
XX
PR 23-JUL-1999; 99US-00360416.
```

XX (REGC) UNIV CALIFORNIA.
 PA Gatti RA;
 PI WPI; 2001-168574/17.
 XX
 DR
 XX
 PT Detecting a mutation or polymorphism in human ataxia telangiectasia gene
 PT or polyexonic eukaryotic gene, involves using mega-single stranded
 PT conformation polymorphism analysis.
 XX
 XX Claim 7; Page 54; 118pp; English.
 PS
 XX
 CC The present sequence is one of a number of primers used in a method for
 CC detecting a mutation or a polymorphism in the human ATM gene, which is
 CC associated with the disease ataxia telangiectasia, or a polyexonic
 CC eukaryotic gene of at least 4 kb. The method uses an improved version of
 CC single-stranded conformation polymorphism (SSCP) electrophoresis that
 CC allows electrophoresis of two or three amplified segments in a single
 CC lane. The method is useful for screening large, complex polyexonic
 CC eukaryotic genes such as the ATM gene for mutations and polymorphisms.
 CC The new mutations and polymorphisms in the ATM gene are useful for
 CC performing more accurate screening of human DNA samples for mutations,
 CC for distinguishing mutations from polymorphisms, and for improving the
 CC efficiency of automated screening methods. The mega-SSCP method provides
 CC a screening method of genes for multiple polymorphisms and mutations at
 CC once. The method is particularly suitable for large, polyexonic,
 CC eukaryotic genes, having mutations and polymorphisms at many points and
 CC not merely at one or a few hot spots. Note: the SEQ ID assigned to this
 CC sequence in the disclosure and claims of the specification is one
 CC number lower than the number given in the sequence listing
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 1 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1989 TGTGCAACACCTTCAGATAA 2008
 Db 1 TTTGCAACACCTTCACCTAA 20
 RESULT 254
 AAC92601/c
 ID AAC92601 standard; DNA; 20 BP.
 XX AAC92601;
 AC
 XX 27-MAR-2001 (first entry)
 DT
 XX Human nucleolin phosphorothioate antisense oligonucleotide, SEQ ID NO:51.
 DE
 XX Human nucleolin; P92; C23; phosphoprotein; ribosome biogenesis;
 KW ribosome transport; cytokinesis; nucleogenesis; cell proliferation;
 KW cell growth; transcriptional repression; replication;
 KW signal transduction; chromatin decondensation; Ag-NOR family;
 KW nucleolin antibody; systemic connective tissue disease; SLE;
 KW systemic lupus erythematosus;
 KW scleroderma-like chronic graft versus host disease;
 KW expression inhibition; tumour formation; cancer; inflammation;
 KW immune disorder; phosphorothioate; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6165786-A.
 XX
 PD 26-DEC-2000.
 XX
 XX 03-NOV-1999; 99US-00433699.
 PF
 XX 03-NOV-1999; 99US-00433699.
 PR
 XX (ISIS-) ISIS PHARM INC.

(ISIS-) ISIS PHARM INC.
 Bennett CP, Cowse LM;
 WPI; 2001-079848/09.
 Novel antisense compound targeted to human nucleolin which specifically
 hybridizes with and inhibits the expression of human nucleolin, useful
 for modulating the expression of nucleolin in cells.
 Claim 14; Col 43-44; 41pp; English.
 Sequences AAC92560-C92639 represent antisense oligonucleotides targeted
 to the human nucleolin gene, which inhibit its expression. The antisense
 oligonucleotides were designed to target different regions of the human
 nucleolin mRNA, and were analysed for their effect on nucleolin mRNA
 levels by quantitative real-time PCR. Nucleolin (also known as P92 or
 C23) is the most abundant nucleolar phosphoprotein in actively growing
 cells. Nucleolin primarily participates in ribosome biogenesis and
 transport of ribosomal components, being able to transiently bind to pre-
 ribosomes in the nucleolus via a ribonucleoprotein consensus sequence.
 However, it has also been shown to be involved in cytokinesis,
 nucleogenesis, cell proliferation and growth, transcriptional repression,
 replication, signal transduction, and chromatin decondensation. Nucleolin
 is a member of the Ag-NOR (active ribosomal gene located in the nucleolar
 organizer region) family of proteins which are markers of active
 ribosomal genes, and whose expression is associated with the prediction
 of tumour growth rate. The presence of antibodies against nucleolin are
 associated with systemic connective tissue diseases such as systemic
 lupus erythematosus (SLE) and scleroderma-like chronic graft versus host
 disease. The oligonucleotides of the invention are useful for diagnosis,
 prevention and treatment of conditions associated with nucleolin
 expression, such as tumour formation, immune disorders and inflammation

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 978 TTTGACAAATCTGCTCTAGA 997
 Db 20 TTTACAAATCTGCTCTGA 1
 RESULT 255
 ABK99798/c
 ID ABK99798 standard; DNA; 20 BP.
 XX ABK99798;
 AC
 XX 21-OCT-2002 (first entry)
 DT
 XX Mouse RAIDD antisense oligonucleotide #52.
 DE
 XX Antisense gene therapy; RAIDD; death domain; caspase recruitment domain;
 KW CARD; hyperproliferative disorder; cancer; growth disorder; mouse;
 KW metabolic disorder; infection; inflammation; tumour formation;
 KW RIP associated ICH-1/CED-3-homologous protein with death domain;
 KW receptor interacting protein; antisense oligonucleotide; ss.
 XX
 OS Mus musculus.
 XX
 PN WO200248314-A2.
 XX
 PD 20-JUN-2002.
 XX
 XX 29-OCT-2001; 2001WO-US050914.
 PF
 XX 01-NOV-2000; 2000US-00705267.
 PR
 XX (ISIS-) ISIS PHARM INC.

PI Zhang H, Freier SM, Watt AT;
 XX WPI; 2002-583496/62.
 DR
 XX Novel antisense compound that hybridizes and inhibits nucleic acid
 PT encoding RAIDD which is an adaptor molecule containing both death domain
 PT and caspase recruitment domains, for treating hyperproliferative
 PT disorder.
 XX
 PS Claim 3; Page 95; 144pp; English.
 XX
 CC The invention describes a compound (I) 8-50 nucleobases in length
 CC targeted to a nucleic acid molecule (II) encoding RAIDD which is an
 CC adaptor molecule containing both death domain (DD) and caspase with and
 CC recruitment domains (CARD), where (I) specifically hybridises with and
 CC inhibits expression of RAIDD, or specifically hybridises with at least an
 CC 8-nucleobase portion of an active site on (II). (I) is useful for
 CC inhibiting the expression of RAIDD (Receptor interacting protein (RIP)
 CC associated ICH-1/CED-3-homologous protein with death domain) in cells or
 CC tissues, and for treating an animal having a disease or condition
 CC associated with RAIDD, where the disease or condition is a
 CC hyperproliferative disorder such as cancer, or a growth or metabolic
 CC disorder. (I) is also useful for diagnostics, therapeutics, prophylaxis,
 CC as research reagents and kits, for distinguishing functions of various
 CC members of a biological pathway, and in antisense gene therapy. (I) is
 CC also useful prophylactically, e.g. to prevent or delay infection,
 CC inflammation or tumour formation. This sequence represents a mouse RAIDD
 CC antisense oligonucleotide used to control expression of the RAIDD protein
 XX
 SQ Sequence 20 BP; 4 A; 2 C; 5 G; 9 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 489 TTGACAGGAACCCCATCCA 508
 DB 20 TTGACAGGAACCCCATCCA 1
 RESULT 256
 ABX14629
 ID ABX14629 standard; DNA; 20 BP.
 AC ABX14629;
 XX
 DT 04-MAR-2003 (first entry)
 DE Human lipoprotein lipase PCR primer #2.
 KW Human; ss; PCR; primer; lipoprotein lipase; LPL; obesity.
 XX
 OS Homo sapiens.
 XX
 FN KR2002041152-A.
 XX
 PD 01-JUN-2002.
 XX
 PF 27-NOV-2000; 2000KR-00070924.
 XX
 PR 27-NOV-2000; 2000KR-00070924.
 XX
 PA (SEOU-) SEOULIN BIO SCI CO LTD.
 XX
 PI Kang BY, Kim GT, Lee JJ;
 XX
 DR WPI; 2002-737873/80.
 XX
 CC Dna marker associated with obesity, used in a predictive method of
 PT likelihood of obesity.
 XX
 PS Example 2; Page 5; 8pp; Korean.
 XX

CC The invention relates to a DNA marker associated with obesity and a
 CC predictive method of the likelihood of obesity using the DNA marker are
 CC provided, used in inhibiting obesity effectively in preventive medicine.
 CC The DNA marker associated with obesity has the nucleotide sequence of
 CC human LPL (lipoprotein lipase) wherein a 6th base from the origin (+1) of
 CC exon 4 in intron 3 of the human LPL is changed from C to T, wherein the
 CC base-substituted nucleotide sequence of human LPL comprises a C type
 CC allele gene with a MboII restriction enzyme-recognition site, i.e. GAAGA,
 CC and a T type allele gene without the MboII restriction enzyme-recognition
 CC site. The predictive method of likelihood of obesity comprises the steps
 CC of: collecting DNA from a human blood sample; amplifying a region of the
 CC intron 3 of the LPL gene in a DNA sample containing a region from -6 to -
 CC 11 bases at the origin of the exon 4 by PCR; digesting the amplified DNA
 CC with MboII; and determining the gene type of the blood sample based on
 CC the band size of a digested DNA fragment. The present sequence is a PCR
 CC primer used in the above method
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2933 GAAGTCTATTTCAACTCTTA 2952
 DB 1 GACAGTCTTTTCACTCTTA 20
 RESULT 257
 ABT11882/c
 ID ABT11882 standard; DNA; 20 BP.
 AC ABT11882;
 XX
 DT 19-DEC-2002 (first entry)
 DE Autonomously steroid producing yeast strain related oligo SEQ ID No 46.
 KW Genetically modified yeast strain; autonomously; metabolism of cholesterol;
 KW 17alpha-hydroxypregnenolone; steroid; cortisol; cortexolone;
 KW 17alpha-hydroxyprogesterone; ds.
 XX
 OS Unidentified.
 XX
 FN WO2000261109-A2.
 XX
 PD 08-AUG-2002.
 XX
 PF 29-JAN-2002; 2002WO-FR000348.
 XX
 PR 31-JAN-2001; 2001FR-00001294.
 XX
 PA (AVET) AVENTIS PHARMA SA.
 XX
 PI Spagnoli R, Achstetter T, Cauet G, Degryse E, Dumas B, Pompon D;
 PI Winter J;
 XX
 DR WPI; 2002-723143/78.
 XX
 PT New genetically modified yeast, useful for producing therapeutic steroids
 PT from simple carbon source, provide high yields at low cost.
 XX
 PS Disclosure; Page 78; 79pp; French.
 XX
 CC The invention relates to a genetically modified yeast strain that
 CC produces, autonomously from a simple carbon source, a steroid, or its
 CC derivative, formed by metabolism of cholesterol. The steroid is 17alpha-
 CC hydroxypregnenolone; cortisol; cortexolone or 17alpha-
 CC hydroxyprogesterone. The genetically modified yeast strain is used to
 CC produce therapeutically useful steroids, and can itself be used as a
 CC pharmaceutical. This polynucleotide sequence represents an
 CC oligonucleotide relating to the steroid producing genetically modified
 CC yeast strain of the invention

```

XX SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1558 GCATCTTCAATGGCTTGTC 1577
|||||
Db 20 GCATCTTCAATGGCTTACC 1

RESULT 258
ABI95123
ID ABI95123 standard; DNA; 20 BP.
XX AC ABI95123;
XX DT 16-FEB-2002 (first entry)
XX DE Capture oligonucleotide Zip ID#2210 oligo #9.
XX KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX OS Synthetic.
XX WO200179548-A2.
XX PD 25-OCT-2001.
XX PF 04-APR-2001; 2001WO-US010958.
XX PR 14-APR-2000; 2000US-0197271P.
XX PA (CORR ) CORNELL RES FOUND INC.
XX PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX WPI; 2002-034366/04.
XX Designing capture oligonucleotide probes for use on a support to which
XX complementary oligonucleotides hybridize with little mismatch.
XX Example 5; Fig 29; 300pp; English.
XX The present invention describes a method (M1) for designing capture
XX oligonucleotide probes (I) for use on a support to which complementary
XX oligonucleotide probes (II) will hybridize with little mismatch, where
XX (I) have melting temperatures within a narrow range. The method is useful
XX for detecting infectious diseases caused by bacterial infectious agents
XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
XX Epstein-Barr virus and polio virus, and parasitic infectious agents
XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
XX medinensis. The method is also useful for detecting genetic diseases such
XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
XX involved in DNA amplification, replication, recombination or repair, the
XX cancer is specifically associated with a gene selected from BRCA1 gene,
XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
XX method is also used for environmental monitoring, forensics and the food
XX and feed industry, detecting comprises scanning (using e.g. a scanning
XX electron microscope and infrared microscope) the support at the
XX particular sites and identifying if ligation of the oligonucleotide probe
XX sets occurred and correlating (using a computer) identified ligation to a
XX presence or absence of the target nucleotide sequences. ABI82074 to
XX ABI97546 represent oligonucleotide sequences used in the exemplification
XX of the present invention.

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XX SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1346 TGATTTTGGGACCAACGACC 1365
|||||
Db 1 TGATTTTGGGACCAACGACC 20

RESULT 259
ACF33763/C
ID ACF33763 standard; DNA; 20 BP.
XX AC ACF33763;
XX DT 24-SEP-2003 (first entry)
XX DE Human CREB phosphorothioate antisense oligonucleotide, SEQ ID NO:21.
XX KW Human; CREB; CAMP response element binding protein; CREB1; bZIP;
KW basic leucine zipper; transcription factor; intracellular signalling;
KW spermatogenesis; circadian rhythm; memory; apoptosis;
KW hyperproliferative disorder; cancer; tumour; blood; soft tissue;
KW apoptosis related disease; neuronal disorder; chromosome 2q32.3-34;
KW cytostatic; neuroprotective; expression inhibition; phosphorothioate;
KW antisense oligonucleotide; ss.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= a
FT /mod base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone with all cytosine residues being 5-
FT methylcytosines. Optionally, it also has 2-
FT 'methoxyethyl (2'-MOE) wings at the 5' and 3' ends,
FT which are 5 nucleotides in length"
XX PN WO2003030617-A2.
XX PD 17-APR-2003.
XX PF 07-OCT-2002; 2002WO-US032181.
XX PR 10-OCT-2001; 2001US-00973827.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Cowsert LM;
XX WPI; 2003-381663/36.
XX New antisense oligonucleotides for modulating CREB (cAMP response element
XX binding protein) gene expression, useful for preventing or treating e.g.
XX cancers, a disease arising from aberrant apoptosis, or neuronal
XX disorders.
XX Claim 3; Page 74; 91pp; English.
XX The invention relates to antisense oligonucleotides (ACF33752-ACF33779)
XX targeted to the human CREB (cAMP response element binding protein) gene,
XX which inhibit its expression. The oligonucleotides were designed to
XX target different regions of human CREB mRNA, and were analysed for their
XX effect on CREB expression by quantitative real-time PCR. CREB (also known
XX as CREB1) is a member of the basic leucine zipper (bZIP) family of
XX transcription factors, and activates transcription of target genes in
XX response to a diverse array of stimuli including peptide hormones, growth
XX factors and protein kinases. It is a component of intracellular
XX signalling events which regulate a wide variety of biological functions,

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CC including spermatogenesis, circadian rhythms and memory. Overexpression
CC of CREB has been found to induce apoptosis in certain cells, although
CC CREB overexpression may also be linked to cancer as it is constitutively
CC activated in human somatotroph adenomas. CREB may also play a role in the
CC development of drug dependency, as it has been found to mediate morphine-
CC induced upregulation of the cAMP pathways that contribute to opiate
CC dependency. The oligonucleotides of the invention are useful for
CC diagnosis, prevention and treatment of CREB-related disorders, such as
CC hyperproliferative disorders (particularly cancer, e.g., those of blood
CC or soft tissue), diseases or conditions arising from aberrant apoptosis,
CC or neuronal disorders. The present sequence represents a human H-ras
CC phosphorothioate antisense oligonucleotide used as a positive control in
CC determining optimal oligonucleotide concentration for a particular cell
CC line
XX
SQ Sequence 20 BP; 3 A; 2 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2377 CCAGCACTTCATCCAGAGC 2396
DB 20 CCAGCACTTCCTACAGC 1
|||||

RESULT 260

ADB99938
ID ADB99938 standard; DNA; 20 BP.

XX
AC ADB99938;

DT 04-DEC-2003 (first entry)

DE Vitamin D nuclear receptor antisense oligonucleotide, SEQ ID 77.

XX Cytostatic; gene therapy; antisense oligonucleotide; human;
KW vitamin D nuclear receptor; cancer; developmental disorder;
KW phosphorothioate; ss.

OS Synthetic.

Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"

PN WO2003041657-A2.

XX
PD 22-MAY-2003.

PF 13-NOV-2002; 2002WO-US036692.

XX
PR 14-NOV-2001; 2001US-00000213.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Dobie K, Roach MP;

XX WPI; 2003-468578/44.

XX New antisense oligonucleotides for modulating vitamin D nuclear receptor
PT gene expression, particularly useful for treating or preventing cancer or
PT developmental disorder, or as diagnostics or research reagents.

XX Example 15; SEQ ID NO 77; 122pp; English.

XX The present invention relates to novel antisense oligonucleotides
CC (ADB99875-ADB99952) which are targeted to a human vitamin D nuclear

CC receptor coding sequence (ADB99864), and specifically hybridizes with and
CC inhibits the expression of vitamin D nuclear receptor. The antisense
CC oligonucleotides are useful for treating an animal having a disease or
CC condition associated with vitamin D nuclear receptor, e.g. cancer or
CC developmental disorder.

SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2495 CCTGCTCAGGACGAGGTGG 2514
|||||

DB 1 CCTTCTCAGGAAGCAGCTGG 20

RESULT 261

ADB90006
ID ADB90006 standard; DNA; 20 BP.

XX
AC ADB90006;

DT 04-DEC-2003 (first entry)

DE Antisense oligonucleotide targeting mouse C3 component, ISIS140094.

XX Mouse; ss; antisense; complement component C3; inflammation;
KW septic shock; multiple organ failure; hyperacute organ failure;
KW autoimmune disorder; CNS inflammation; multiple sclerosis;
KW atherosclerosis; tumour.

OS Mus musculus.

Key Location/Qualifiers
FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone and all cytosines are 5
FT -methyl cytosines"

FT modified_base 1..5
FT /tag= a

FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"

FT modified_base 16..20
FT /tag= c

FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"

PN US2003096775-A1.

XX
PD 22-MAY-2003.

XX
PF 23-OCT-2001; 2001US-00001076.

XX
PR 23-OCT-2001; 2001US-00001076.

XX (ISIS-) ISIS PHARM INC.

XX Graham MJ, Watt AT;

XX WPI; 2003-606441/57.

XX New antisense oligonucleotides targeted to a nucleic acid molecule
PT encoding complement component C3, useful for treating a disease or
PT condition associated with complement component C3, e.g. autoimmune
PT disorder or infection.

PS Claim 3; Page 27; 72pp; English.

XX The invention relates to a compound 8-50 nucleobases in length targeted
CC to a nucleic acid molecule encoding complement component C3. The compound
CC specifically hybridizes with the nucleic acid molecule encoding

complement component C3 and inhibits the expression of complement component C3, or specifically hybridizes with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding complement component C3. Also included are a composition comprising the compound and a pharmaceutical carrier or diluent, inhibiting the expression of complement component C3 in cells or tissues (comprising contacting the cells or tissues with the compound cited above) and treating an animal having a disease or condition associated with complement component C3 comprising administering to the animal the compound cited above so that expression of complement component C3 is inhibited. The antisense compounds are useful for inhibiting the expression of complement component C3 in cells or tissues, or for treating an animal having a disease or condition associated with complement component C3 such as an autoimmune disorder (e.g. multiple sclerosis), an infection, or atherosclerosis, inflammation, septic shock, multiple organ failure, hyperacute organ failure and CNS inflammation. The compounds are also useful as research reagents and diagnostics, in distinguishing functions of various members of a biological pathway, or for preventing or delaying infection, inflammation or tumour formation. The present sequence is an antisense oligonucleotide targeting mouse C3.

XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1399 TTACCATGAGTTCACAACTTC 1418
DB 1 TGACCCCTGAGGTCACAACTTC 20

RESULT 262
ADC83901/C
ID ADC83901 standard; DNA; 20 BP.
XX
AC ADC83901;
XX
XX 01-JAN-2004 (first entry)
XX
DE Human papillomavirus type 33 (HPV 33) detection oligonucleotide #5.

XX probe; human papilloma virus; HPV; detection; identification; ss.
KW
XX Human papillomavirus type 33.
OS
XX EPI302550-A1.
XX
XX 16-APR-2003.
XX
PF 10-OCT-2001; 2001EP-00123379.
XX
XX 10-OCT-2001; 2001EP-00123379.
PR
XX (KING-) KING CAR FOOD IND CO LTD.

PA Lin C, Lin R, You C, Huang H, Lee B, Lee H, Lin Y, Fan C;
PI Hsu H, Shih C, Yeh C, Kao Y, Pan C, Chan P;
XX
DR WPI; 2003-432398/41.
XX
XX Detector for identifying human papilloma virus subtypes, comprises carrier having two parts carrying first and second oligonucleotides that respectively hybridize with DNA contained in first and second subtypes of the virus.

PS Claim 4; SEQ ID NO 131; 221pp; English.
XX
XX The invention comprises oligonucleotides for detecting and identifying subtypes of human papilloma virus (HPV) contained in a sample. The oligonucleotides of the invention are useful for simultaneously detecting and identifying subtypes of HPVs. The present DNA sequence represents an HPV detection oligonucleotide of the invention.

XX
SQ Sequence 20 BP; 12 A; 1 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3304 ATTTTATTTTATATATCC 3323
DB 20 ATTTTCATTTTATATGTAC 1

RESULT 263
ADC84033/C
ID ADC84033 standard; DNA; 20 BP.
XX
AC ADC84033;
XX
XX 01-JAN-2004 (first entry)
XX
DE Human papillomavirus type 52 (HPV 52) detection oligonucleotide #6.
XX
XX probe; human papilloma virus; HPV; detection; identification; ss.
KW
XX Human papillomavirus type 52.
OS
XX EPI302550-A1.
XX
XX 16-APR-2003.
XX
PF 10-OCT-2001; 2001EP-00123379.
XX
PR 10-OCT-2001; 2001EP-00123379.
XX
PA (KING-) KING CAR FOOD IND CO LTD.

PI Lin C, Lin R, You C, Huang H, Lee B, Lee H, Lin Y, Fan C;
PI Hsu H, Shih C, Yeh C, Kao Y, Pan C, Chan P;
XX
DR WPI; 2003-432398/41.
XX
XX Detector for identifying human papilloma virus subtypes, comprises carrier having two parts carrying first and second oligonucleotides that respectively hybridize with DNA contained in first and second subtypes of the virus.

PS Claim 4; SEQ ID NO 263; 221pp; English.

XX The invention comprises oligonucleotides for detecting and identifying subtypes of human papilloma virus (HPV) contained in a sample. The oligonucleotides of the invention are useful for simultaneously detecting and identifying subtypes of HPVs. The present DNA sequence represents an HPV detection oligonucleotide of the invention.

XX Sequence 20 BP; 12 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3304 ATTTTATTTTATATATCC 3323
DB 20 ATTTTCATTTTATATGTGC 1

RESULT 264
ADE27866
ID ADE27866 standard; DNA; 20 BP.
XX
AC ADE27866;
XX
XX 29-JAN-2004 (first entry)
XX

```
DE Human B7-1 targeted oligonucleotide SEQ ID 128.
XX
XX ss; human; B7-1; inflammatory skin disorder; antisense; psoriasis;
KW contact dermatitis; atopic dermatitis; seborrheic dermatitis;
KW nummular dermatitis; generalised exfoliative dermatitis; eczema;
KW critical costimulatory molecule.
XX
OS Synthetic.
OS Homo sapiens.
XX
XX US2003176374-A1.
XX
XX PD 18-SEP-2003.
XX
XX PF 09-MAY-2001; 2001US-00851871.
XX
XX PR 31-DEC-1996; 96US-00777266.
XX PR 04-JUN-1999; 99US-00326186.
XX PR 25-MAY-2000; 2000WO-US014471.
XX
XX PA (BENN/) BENNETT C F.
XX PA (VICK/) VICKERS T A.
XX PA (KARR/) KARRAS J G.
XX
XX PI Bennett CF, Vickers TA, Karras JG;
XX
XX WPI; 2003-863863/80.
XX
XX Treating an inflammatory skin disorder such as psoriasis comprises
PT topically applying an antisense compound targeted to the nucleic acid
PT encoding human B7 protein.
XX
XX Example 12; SEQ ID NO 128; 88pp; English.
XX
XX The invention relates to a method of treating an inflammatory skin
CC disorder in an individual by topically applying an antisense compound
CC targeted to a nucleic acid molecule encoding a human B7 protein. The
CC invention is for treating an inflammatory skin disorder in individual.
CC The skin disorder is psoriasis, contact dermatitis, atopic dermatitis,
CC seborrheic dermatitis, nummular dermatitis, generalised exfoliative
CC dermatitis or eczema. The invention effectively modulates critical
CC costimulatory molecules such as the B7 protein. The present sequence
CC represents a human B7-1 targeted oligonucleotide.
XX
XX SQ Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1317 TTGAGTTTCAAGGTTGCTG 1336
XX 1 TTTAGTTTCACAGCTGCTG 20
XX
XX RESULT 265
XX ADE27991/C
XX ID ADE27991 standard; DNA; 20 BP.
XX
XX AC ADE27991;
XX
XX DT 29-JAN-2004 (first entry)
XX
XX DE Human B7-1 targeted oligonucleotide SEQ ID 253.
XX
XX ss; human; B7-1; inflammatory skin disorder; antisense; psoriasis;
KW contact dermatitis; atopic dermatitis; seborrheic dermatitis;
KW nummular dermatitis; generalised exfoliative dermatitis; eczema;
KW critical costimulatory molecule.
XX
XX OS Synthetic.
XX OS Homo sapiens.
XX
XX PT A detecting apparatus and a detecting method for identifying the subtypes
of many species of human papilloma viruses at the same time and a
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PN US2003176374-A1.
XX
XX PD 18-SEP-2003.
XX
XX PF 09-MAY-2001; 2001US-00851871.
XX
XX PR 31-DEC-1996; 96US-00777266.
XX PR 04-JUN-1999; 99US-00326186.
XX PR 25-MAY-2000; 2000WO-US014471.
XX
XX PA (BENN/) BENNETT C F.
XX PA (VICK/) VICKERS T A.
XX PA (KARR/) KARRAS J G.
XX
XX PI Bennett CF, Vickers TA, Karras JG;
XX
XX WPI; 2003-863863/80.
XX
XX Treating an inflammatory skin disorder such as psoriasis comprises
PT topically applying an antisense compound targeted to the nucleic acid
PT encoding human B7 protein.
XX
XX Example 19; SEQ ID NO 253; 88pp; English.
XX
XX The invention relates to a method of treating an inflammatory skin
CC disorder in an individual by topically applying an antisense compound
CC targeted to a nucleic acid molecule encoding a human B7 protein. The
CC invention is for treating an inflammatory skin disorder in individual.
CC The skin disorder is psoriasis, contact dermatitis, atopic dermatitis,
CC seborrheic dermatitis, nummular dermatitis, generalised exfoliative
CC dermatitis or eczema. The invention effectively modulates critical
CC costimulatory molecules such as the B7 protein. The present sequence
CC represents a human B7-1 targeted oligonucleotide.
XX
XX SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 3767 GGCTGGGATCCCTCCCTGTT 3786
XX 20 GGCTGGCATCCCTCTCTTT 1
XX
XX RESULT 266
XX ADF43774/C
XX ID ADF43774 standard; DNA; 20 BP.
XX
XX AC ADF43774;
XX
XX DT 12-FEB-2004 (first entry)
XX
XX DE HPV 33 detecting probe M3305.
XX
XX KW detection; human papillomavirus; HPV subtype; probe; ss.
XX
XX OS Human papillomavirus type 33.
XX
XX PN JP2002360271-A.
XX
XX PD 17-DEC-2002.
XX
XX PF 28-NOV-2001; 2001JP-00362595.
XX
XX PR 04-MAY-2001; 2001TW-00110785.
XX
XX PA (KING-) KING CAR FOOD IND CO LTD.
XX
XX WPI; 2003-600935/57.
XX
XX A detecting apparatus and a detecting method for identifying the subtypes
of many species of human papilloma viruses at the same time and a
```

PT composition for the detection.

PS Claim 1; SEQ ID NO 131; 166pp; Japanese.

XX This invention describes a novel detecting apparatus for identifying the
 CC subtypes of human papillomaviruses (HPV) contained in a sample which
 CC comprises a carrier which can load sample, a first oligonucleotide loaded
 CC on first part of the carrier and a second oligonucleotide loaded on
 CC second part of carrier, in which first and second oligonucleotides
 CC hybridise with the DNA of the first and second HPV subtypes and can
 CC identify HPV subtype contained in sample at the same time. ADF43644-
 CC ADF44289 represent oligonucleotide probes used in the method of the
 CC invention.

XX Sequence 20 BP; 12 A; 1 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3304 ATTTTATTTTATATATCC 3323

DB 20 ATTTTCATTTTATATGTC 1

RESULT 267

ADP43935/c

ID ADF43935 standard; DNA; 20 BP.

AC ADF43935;

DT 12-FEB-2004 (first entry)

DE HPV 52 detecting probe M5206.

XX detection; human papillomavirus; HPV subtype; probe; ss.

OS Human papillomavirus type 52.

PN JP2002360271-A.

PD 17-DEC-2002.

PF 28-NOV-2001; 2001JP-00362595.

PR 04-MAY-2001; 2001TW-00110785.

PA (KING-) KING CAR FOOD IND CO LTD.

DR WPI; 2003-600935/57.

XX A detecting apparatus and a detecting method for identifying the subtypes
 PT of many species of human papilloma viruses at the same time and a
 PT composition for the detection.

PS Claim 1; SEQ ID NO 292; 166pp; Japanese.

XX This invention describes a novel detecting apparatus for identifying the
 CC subtypes of human papillomaviruses (HPV) contained in a sample which
 CC comprises a carrier which can load sample, a first oligonucleotide loaded
 CC on first part of the carrier and a second oligonucleotide loaded on
 CC second part of carrier, in which first and second oligonucleotides
 CC hybridise with the DNA of the first and second HPV subtype and can
 CC identify HPV subtype contained in sample at the same time. ADF43644-
 CC ADF44289 represent oligonucleotide probes used in the method of the
 CC invention.

XX Sequence 20 BP; 12 A; 2 C; 2 G; 4 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.4%; Score 15.2; DB 1; Length 20;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3304 ATTTTATTTTATATATCC 3323

DB 20 ATTTTCATTTTATATGTC 1

RESULT 268

ADP88065/c

ID ADF88065 standard; DNA; 20 BP.

AC ADF88065;

DT 26-FEB-2004 (first entry)

DE Single nucleotide polymorphism detection primer, SEQ ID No 1648.

XX human; single nucleotide polymorphism; microarray; side effect; ss;
 KW primer; PCR.

OS Synthetic.

OS Homo sapiens.

PN JP2003235571-A.

PD 26-AUG-2003.

PF 12-FEB-2002; 2002JP-00034717.

PR 12-FEB-2002; 2002JP-00034717.

PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.

DR WPI; 2003-820454/77.

XX Novel polynucleotide useful for detecting single nucleotide polymorphisms
 PT in human gene.

PS Claim 2; SEQ ID NO 1648; 704pp; Japanese.

XX The invention relates to a novel polynucleotide isolated and purified
 CC from a human gene having any one of 935 fully defined sequences as given
 CC in specification, or a sequence having a base substitution. The invention
 CC further relates to: an oligonucleotide containing single nucleotide
 CC polymorphisms; a PCR primer set chosen from the combination of two DNA
 CC fragments from any one of 1220 fully defined sequences as given in
 CC specification; a labelling probe containing the SNP containing oligo; and
 CC a microarray equipped with the SNP containing oligo. The isolated human
 CC gene of the invention is useful for detecting the single nucleotide
 CC polymorphisms in human gene. The isolated human gene is also useful for
 CC diagnosis of disease and determination of side effect to a medical agent.
 CC The isolated human gene is also effective in detecting single nucleotide
 CC polymorphisms in a human gene. This polynucleotide sequence represents
 CC one of the PCR primers used in the single nucleotide polymorphism
 CC detection method of the invention.

XX Sequence 20 BP; 5 A; 9 C; 2 G; 4 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.4%; Score 15.2; DB 1; Length 20;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2774 CAGGCTTATGCTAAGGGTG 2793

DB 20 CAGGCTTATGCGAAGGGTG 1

RESULT 269

ABZ94003/c

ID ABZ94003 standard; DNA; 20 BP.

AC ABZ94003;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX WO200285308-A2.
 PN
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 9245; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytosstatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 4 A; 2 C; 2 G; 12 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1828 ACATAATGACTTCCAAAAA 1847
 Db 20 AAATAATGACTTCAGAAAAA 1
 RESULT 270
 ID ABZ86103/c
 XX ABZ86103 standard; DNA; 20 BP.
 AC ABZ86103;
 XX
 DT 17-OCT-2003 (first entry)
 XX

DE Human oligonucleotide sequence.
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX WO200285308-A2.
 PN
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 1345; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytosstatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 10 A; 1 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3265 TCGAACATGTTCTATTTTTT 3284
 Db 20 TCAACATGCTATATTTTTT 1
 RESULT 271
 ID ABZ89062/c
 XX ABZ89062 standard; DNA; 20 BP.
 AC ABZ89062;
 XX
 DT 17-OCT-2003 (first entry)
 XX

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

XX WO200285308-A2.

PN 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013135.

PF 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandraagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 4304; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e-02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2569 TGGGGCGGCACATCTCTCGG 2588

DB 20 TGGGGCTGCACATAGTCTGG 1

RESULT 272

ID ABZ91585/c

XX ABZ91585 standard; DNA; 20 BP.

AC ABZ91585;

XX 17-OCT-2003 (first entry)

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

OS Homo sapiens.

XX WO200285308-A2.

PN 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013135.

PF 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandraagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 6827; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 9 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e-02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1173 TTAGTTAACTGTAAATTTGG 1192

DB 20 TTATTTACAGTACATTGG 1

RESULT 273

ID ABZ91732/c

XX ABZ91732 standard; DNA; 20 BP.

AC ABZ91732;

XX 17-OCT-2003 (first entry)

DT 17-OCT-2003 (first entry)

XX

```

DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX Disclosure; SEQ ID NO 6974; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
XX receptor, producing bronchodilation, increasing levels of adenosine or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 3300 ATATATTTTATTTTATAT 3319
XX Db 20 ATATATTTTATATATAT 1
XX
XX RESULT 274
XX ABZ91733/c
XX ID ABZ91733 standard; DNA; 20 BP.
XX
XX AC ABZ91733;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX

```

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DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX Disclosure; SEQ ID NO 6974; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 3300 ATATATTTTATTTTATAT 3319
XX Db 20 ATATATTTTATATATAT 1
XX
XX RESULT 274
XX ABZ91733/c
XX ID ABZ91733 standard; DNA; 20 BP.
XX
XX AC ABZ91733;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX

```

DE Human MCP4 oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS

XX WO200285308-A2.

PN

XX 31-OCT-2002.

PD

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI

XX WPI; 2003-229219/22.

DR

XX

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX

PS Disclosure; SEQ ID NO 13282; 872pp; English.

XX

CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 3184 TCTCTTACAGAGGTTAAAG 3203
 |||||
 DB 20 TCTCTTGCAGAGGCTGAAG 1
 |||||

RESULT 276
 ABZ98571
 ID ABZ98571 standard; DNA; 20 BP.
 XX
 AC ABZ98571;
 XX
 XX 17-OCT-2003 (first entry)
 DT
 XX

DE Human ICAM oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS

XX WO200285308-A2.

PN

XX 31-OCT-2002.

PD

XX

PF 23-APR-2002; 2002WO-US013135.

XX

PR 24-APR-2001; 2001US-0286137P.

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI

XX WPI; 2003-229219/22.

DR

XX

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX

PS Disclosure; SEQ ID NO 13813; 872pp; English.

XX

CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 3750 TTTAGGGAGACACAGATGCC 3769
 |||||
 DB 1 TTGAGGGGACACAGATGTC 20
 |||||

RESULT 277
 AAD52229/c
 ID AAD52229 standard; DNA; 20 BP.
 XX
 AC AAD52229;
 XX
 XX 02-MAY-2003 (first entry)
 DT
 XX

DE Human IFNGR1 antisense oligonucleotide, ISIS 147645.
XX
KW Human; interferon gamma receptor 1; IFNGR1; autoimmune disorder; cancer;
KW diabetes; autoimmune thyroiditis; multiple sclerosis; immunosuppressive;
KW infection; neuroprotective; inflammation; cytostatic; antisense therapy;
KW autoimmune arthritis; autoimmune insulinitis; Crohn's disease; tumour;
KW receptor; antisense; phosphorothioate backbone; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
XX modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidine residues
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
PN WO200288162-A1.
XX
XX 07-NOV-2002.
XX
XX 16-APR-2002; 2002WO-US012006.
XX
XX 26-APR-2001; 2001US-00843376.
XX
XX (ISIS-) ISIS PHARM INC.
PA
PI Bennett FC, Watt AT;
XX
XX WPI; 2003-156687/15.
DR
XX
XX New antisense oligonucleotides targeted to a nucleic acid molecule
PT encoding interferon gamma receptor 1, useful for treating an autoimmune
PT disorder, e.g. diabetes, multiple sclerosis or Crohn's disease, or
PT cancer.
XX
PS Claim 3; Page 85; 124pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of interferon gamma receptor 1 (IFNGR1).
CC The compositions comprise antisense compounds, particularly antisense
CC oligonucleotides, targeted to nucleic acids encoding IFNGR1. The
CC antisense compound is useful for treating a disease or condition
CC associated with IFNGR1, such as an autoimmune disorder (e.g. diabetes,
CC autoimmune thyroiditis, multiple sclerosis, autoimmune arthritis,
CC autoimmune insulinitis or Crohn's disease), cancer or a disease or
CC condition caused by aberrant apoptosis. It is also used for inhibiting
CC the expression of IFNGR1, as research reagents and diagnostics, to
CC distinguish between functions of various members of a biological pathway,
CC as prophylactic agents (e.g. to prevent or delay infection, inflammation
CC or tumour formation), and as probes or primers. It is also used in
CC antisense therapy. The present sequence is an antisense oligonucleotide
CC targeted to human IFNGR1 DNA. This sequence is used in the
CC exemplification of the invention
XX
SQ Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1689 GAGCAGTTCTCTCCAAACG 1708
||| ||||| ||||| |||
DB 20 GAGCCGTTCTCTCCAAAC 1

RESULT 278
ADA26894/c
ID ADA26894 standard; DNA; 20 BP.
XX
AC ADA26894;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human PRL-3 reverse PCR primer #178, used in gene mapping.
XX
KW Metastasis; neoplastic growth; detection; prediction;
KW neoplastic growth marker; drug screening; cancer; tumour;
KW gastrointestinal; prostate; breast; colorectal; diagnostic imaging;
KW drug targeting; chromosome 8q24.3; human;
KW protein tyrosine phosphatase type IVA member 3; PRL-3; gene mapping;
KW cytostatic; PCR; primer; ss.
XX
OS Homo sapiens.
XX
XX WO2003031930-A2.
XX
XX 17-APR-2003.
XX
XX 02-OCT-2002; 2002WO-US031247.
XX
XX 09-OCT-2001; 2001US-0327332P.
XX
XX (UYJO) UNIV JOHNS HOPKINS.
XX
XX Vogelstein B, Kinzler KW, Saha S, Bardelli A;
XX
XX WPI; 2003-393457/37.
DR
XX
XX Identifying regions of neoplastic growth in a human body, useful for
PT detecting or predicting metastasis, comprises administering to the human
PT body an antibody or peptide that specifically binds to a protein marker
PT of neoplastic growth.
XX
PS Disclosure; Page 23; 42pp; English.
XX
CC The invention relates to methods for identifying regions of neoplastic
CC growth in a human patient, especially for detecting or predicting
CC metastasis. The methods involve determining whether a neoplastic growth
CC marker protein is overexpressed, either by the use of an antibody
CC specific for the protein, or by the use of PCR or hybridisation to detect
CC nucleic acids encoding the marker proteins. A set of neoplastic growth
CC markers are disclosed (SAGE (serial analysis of gene expression) tags for
CC these are given in ADA26759-ADA26796), with protein tyrosine phosphatase
CC type IVA member 3 (also known as PRL-3) being a preferred neoplastic
CC growth marker. The neoplastic growth markers are specifically expressed
CC at a higher level in metastatic cancers, compared with advanced and early
CC stage cancers and normal cells from which the cancer is derived.
CC Overexpression of the neoplastic growth markers is taken as an indication
CC that the tissue has a propensity to metastasise. The invention also
CC encompasses methods for treating a patient with an advanced or metastatic
CC cancer, and for identifying candidate drugs for treating advanced or
CC metastatic cancers. The methods of the invention are useful for
CC identifying regions of neoplastic growth, for detecting or predicting
CC metastasis, or identifying candidate drugs for treating advanced or
CC metastatic cancers. The invention is particularly applicable to
CC gastrointestinal, prostate, breast or colorectal cancers. Antibodies
CC which bind to the neoplastic growth marker proteins are additionally
CC useful for diagnostic imaging and for targeting cytotoxic or
CC chemotherapeutic drugs. The present sequence represents a PCR primer used
CC to map the PRL-3 gene to chromosome 8q24.3.
XX
SQ Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2071 TGTGGTCTCAGTGTGCTT 2090
 DB 20 TGTGTCTCTCAGGAGCTT 1

RESULT 279
 ADL16109
 ID ADL16109 standard; DNA; 20 BP.
 XX
 AC ADL16109;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Human lipoprotein lipase reverse PCR primer R0, SEQ ID NO:6.
 XX
 KW Human; lipoprotein lipase; LPL; polymorphism analysis;
 KW single nucleotide polymorphism; SNP; diagnosis; genetic predisposition;
 KW obesity; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN KR2002078511-A.
 XX
 PD 19-OCT-2002.
 XX
 PF 03-APR-2001; 2001KR-00017640.
 XX
 PR 03-APR-2001; 2001KR-00017640.
 XX
 PA (SEOU-) SEOULIN BIO SCI CO LTD.
 XX
 PI Jun GA, Kang BY, Kim GT, Lee JJ;
 XX
 DR WPI; 2003-338952/32.
 XX
 PT Primers useful for predicting the likelihood of obesity.
 XX
 PS Claim 1; SEQ ID NO 6; 7pp; Korean.
 XX
 CC The invention relates to PCR primers (ADL16104-ADL16111) for use in the
 CC analysis of single nucleotide polymorphisms (SNPs) in the human
 CC lipoprotein lipase (LPL) gene (GenBank accession numbers AF050163) which
 CC are associated with a predisposition to obesity. The invention also
 CC encompasses a kit comprising a pair of sense and antisense primers. The
 CC primers and kit can be used to predict the likelihood of an individual
 CC developing obesity, so that it can be prevented. The present sequence
 CC represents a specifically claimed human LPL reverse PCR primer of the
 CC invention.
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. NO. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2933 GAAAGTCTTTCACTCTTA 2952
 DB 1 GACAGTCTTTCACTCTTA 20

RESULT 280
 ABD27815/c
 ID ABD27815 standard; DNA; 20 BP.
 XX
 AC ABD27815;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AA102454-derived oligonucleotide SEQ ID 6827.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cystostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 CC Pharmaceutical composition for treating asthma, has antisense
 CC oligonucleotide containing less percentage of adenosine, targeted to
 CC nucleic acids associated with lung airway or lung dysfunction, and
 CC bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 6827; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 9 A; 3 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. NO. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1173 TTACTTAAGTCTTAATTGG 1192
 DB 20 TTATTTAACAGTACATTGG 1

CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3184 TCTCCTTACAGAGTTAAAG 3203
 ||||| ||||| ||||| |||||
 Db 20 TCTCCTTGCAGAGGCTGAAG 1
 RESULT 283
 ABD31602
 ID ABD31602 standard; DNA; 20 BP.
 XX
 AC ABD31602;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human ICAM-derived oligonucleotide SEQ ID 13813.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 FN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PS Claim 15; SEQ ID NO 13813; 763pp; English.
 CC
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3750 TTTAGGGAGACACAGATGCC 3769
 ||||| ||||| ||||| |||||
 Db 1 TTGAGGGGACACAGATGTC 20
 RESULT 284
 ABD30233/c
 ID ABD30233 standard; DNA; 20 BP.
 XX
 AC ABD30233;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AA284245-derived oligonucleotide SEQ ID 9245.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 FN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.

PS Claim 15; SEQ ID NO 9245; 763pp; English.

CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 4 A; 2 C; 2 G; 12 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 1828 ACATAATGACTTCCAAAAA 1847

Db 20 AATAATGACTTCAGAAAA 1

RESULT 285
ABD27963/c
ID ABD27963 standard; DNA; 20 BP.

XX ABD27963;

XX 29-JUL-2004 (first entry)

XX AA497002-derived oligonucleotide SEQ ID 6975.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013143.

XX

PR 24-APR-2001; 2001US-0286036P.

XX

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

DR Pharmaceutical composition for treating asthma, has antisense

XX oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX Claim 15; SEQ ID NO 6975; 763pp; English.

PS This invention describes a novel composition (a) a first active agent,

XX comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or bronchoconstriction and/or lung

CC inflammation, allergies and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

XX thymidines present in the target RNA serves to prevent the breakdown of

CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it

XX

SQ Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 2.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 3300 ATATATTTTATTTTATAT 3319

Db 20 ATATATATATTTTCATAT 1

RESULT 286

ABD25292/c

ID ABD25292 standard; DNA; 20 BP.

XX ABD25292;

XX 29-JUL-2004 (first entry)

XX AI092429-derived oligonucleotide SEQ ID 4304.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

XX

KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.

Homo sapiens.

WO200285309-A2.

31-OCT-2002.

23-APR-2002: 2002WO-US013143.

24-APR-2001: 2001US-0286036P

(EPIG-) EPIGENESTS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J. Acumillar D:

Nyce JW, Li I, Sandrasaga A, Miller S, Tang L. Shhababuddin S:

WPI: 2003-093058/08

Pharmaceutical composition for treating asthma has antisen

Pharmaceutical composition for treating asthma, has an adenine dinucleotide composition containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

Claim 15: SEQ ID NO 4304: 763pp: English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery

Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.4%: Score 15.2: DB 1: Length 20:

Best Local Similarity 85.0%; Pred. No. 2.3e+02;

Matches	17;	Conservative	0;	Mismatches	3;	Indels	0;	Gaps	0;
---------	-----	--------------	----	------------	----	--------	----	------	----

2569 TGGGGCGGCATCTTCTGG 2588

20 TGGGGCTGCACATAGTCTGG 1

RESULT 287

```
SQ Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3300 ATATATTTTATTTTATAT 3319
|||||
DB 20 ATATATTTTATATATAT 1

RESULT 288
ADG72071/c
ID ADG72071 standard; DNA; 20 BP.
XX
AC ADG72071;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human SREBP-1 antisense oligonucleotide ISIS 220068.
XX
KW Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
KW Antisense gene therapy;
KW sterol regulatory element-binding transcription factor; SREBP;
KW metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW hyperlipidaemia.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /*mod_base= OTHER
FT /*notes= "Phosphorothioate linkages. All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /*mod_base= OTHER
FT /*notes= "2'-methoxyethyl residues"
FT modified_base 16..20
FT /*tag= c
FT /*mod_base= OTHER
FT /*note= "2'-methoxyethyl residues"
XX
PN US2003224515-A1.
XX
XX 04-DEC-2003.
XX
XX 04-JUN-2002; 2002US-00161996.
XX
XX 04-JUN-2002; 2002US-00161996.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Baker BF, Dobie KW;
XX
XX WPI; 2004-022079/02.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding sterol regulatory element-binding protein-1, useful
XX for treating diabetes, atherosclerosis or hyperlipidemia.
XX
XX Example 15; SEQ ID NO 66; 112pp; English.
XX
XX The invention relates to a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
XX as sterol regulatory element-binding transcription factor, SREBF), and
XX inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
XX Also included are a compound 8-80 nucleobases in length that specifically
XX hybridises with at least an 8-nucleobase portion of an active site on a
XX nucleic acid molecule encoding sterol regulatory element-binding protein-
XX 1, a composition comprising the compound and a carrier or diluent,
```

```
CC inhibiting the expression of sterol regulatory element-binding protein-1
CC in cells or tissues (by contacting the cells or tissues with the compound
CC so that expression of sterol regulatory element-binding protein-1 is
CC inhibited) and treating an animal having a disease or condition
CC associated with sterol regulatory element-binding protein-1 by
CC administering to the animal a therapeutic or prophylactic amount of the
CC compound so that expression of sterol regulatory element-binding protein-
CC 1 is inhibited. The antisense oligonucleotide comprises at least one
CC modified internucleoside linkage (preferably a phosphorothioate linkage),
CC at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC moiety) or at least one modified nucleobase (preferably 5-
CC methylcytosine). The compound, composition and methods are useful for
CC treating a disease or condition associated with sterol regulatory element
CC -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC are also useful in research and diagnostics for modulating the expression
CC of sterol regulatory element-binding protein-1. The present sequence is
CC an antisense oligonucleotide targeting human SREBP-1.
XX
XX Sequence 20 BP; 3 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
```

```
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 8 CACTGCTGCTCACAGAAAGCA 27
|||||
DB 20 CACTGCTGCTCACAAAGCA 1
```

```
RESULT 289
ADG72205
ID ADG72205 standard; cDNA; 20 BP.
XX
AC ADG72205;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human SREBP-1 target site #42.
XX
KW Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
KW antisense gene therapy;
KW sterol regulatory element-binding transcription factor; SREBP;
KW metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW hyperlipidaemia.
```

```
OS Homo sapiens.
XX
XX US2003224515-A1.
XX
XX 04-DEC-2003.
XX
XX 04-JUN-2002; 2002US-00161996.
XX
XX 04-JUN-2002; 2002US-00161996.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Freier SM, Baker BF, Dobie KW;
XX
XX WPI; 2004-022079/02.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
XX nucleic acid encoding sterol regulatory element-binding protein-1, useful
XX for treating diabetes, atherosclerosis or hyperlipidemia.
XX
XX Example 16; SEQ ID NO 200; 112pp; English.
```

```
XX The invention relates to a compound 8-80 nucleobases in length targeted
XX to, and which specifically hybridises with a nucleic acid molecule
XX encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
XX as sterol regulatory element-binding transcription factor, SREBF), and
XX inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
XX Also included are a compound 8-80 nucleobases in length that specifically
XX hybridises with at least an 8-nucleobase portion of an active site on a
XX nucleic acid molecule encoding sterol regulatory element-binding protein-
XX 1, a composition comprising the compound and a carrier or diluent,
```

CC Also included are a compound 8-80 nucleobases in length that specifically
 CC hybridises with at least an 8-nucleobase portion of an active site on a
 CC nucleic acid molecule encoding sterol regulatory element-binding protein-
 CC 1, a composition comprising the compound and a carrier or diluent,
 CC inhibiting the expression of sterol regulatory element-binding protein-1
 CC in cells or tissues (by contacting the cells or tissues with the compound
 CC so that expression of sterol regulatory element-binding protein-1 is
 CC inhibited) and treating an animal having a disease or condition
 CC associated with sterol regulatory element-binding protein-1 by
 CC administering to the animal a therapeutic or prophylactic amount of the
 CC compound so that expression of sterol regulatory element-binding protein-
 CC 1 is inhibited. The antisense oligonucleotide comprises at least one
 CC modified internucleoside linkage (preferably a phosphorothioate linkage),
 CC at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
 CC moiety) or at least one modified nucleobase (preferably 5-
 CC methylcytosine). The compound, composition and methods are useful for
 CC treating a disease or condition associated with sterol regulatory element
 CC binding protein-1, such as a metabolic disorder e.g. diabetes, or a
 CC cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
 CC are also useful in research and diagnostics for modulating the expression
 CC of sterol regulatory element-binding protein-1. The present sequence is a
 CC human SREBP-1 target region for the antisense oligonucleotides.

XX
 SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 8 CACTGCTGTCACAGAAGCA 27
 DB 1 CACTGCTGTCACAGAAGCA 20
 |||||
 |||||

RESULT 290
 ADH67543/c
 ID ADH67543 standard; DNA; 20 BP.

XX
 AC ADH67543;
 XX
 DT 25-MAR-2004 (first entry)

XX Human glucocorticoid receptor-specific antisense oligonucleotide #4377.
 DE antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX Homo sapiens.
 XX
 PN WO2003099215-A2.
 XX
 PD 04-DEC-2003.

XX 20-MAY-2003; 2003WO-US016084.
 XX
 PR 20-MAY-2002; 2002US-0381857P.

XX (PHAA) PHARMACIA CORP.
 XX
 PI Crosby SD, Nalseth AE;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.

PS Claim 4; SEQ ID NO 4377; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The

CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity. The
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX
 SQ Sequence 20 BP; 13 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3301 TATATTTTATTTTATATAT 3320
 DB 20 TATATTTTATTTTATATAT 1
 |||||
 |||||

RESULT 291

ADH67827/c
 ID ADH67827 standard; DNA; 20 BP.

XX
 AC ADH67827;

XX
 DT 25-MAR-2004 (first entry)

XX Human glucocorticoid receptor-specific antisense oligonucleotide #4661.

XX antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX Homo sapiens.

XX
 PN WO2003099215-A2.

XX
 PD 04-DEC-2003.

XX 20-MAY-2003; 2003WO-US016084.

XX 20-MAY-2002; 2002US-0381857P.

XX (PHAA) PHARMACIA CORP.

XX Crosby SD, Nalseth AE;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.

PS Claim 4; SEQ ID NO 4661; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity,
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX Sequence 20 BP; 13 A; 1 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3302 ATATTTTATTTTATATAT 3321

ID AD12/028 standard; DNA; 20 BF.

```
XX AC ADI27028;
XX XX
XX DT 22-APR-2004 (first entry)
XX XX
XX DE Cyclin dependent kinase 4 antisense oligonucleotide #194.
XX XX
XX KW cytostatic; antidiabetic; antiinfertility; gene therapy;
XX KW cyclin-dependent kinase 4; diabetes; infertility;
XX KW hyperproliferative disorder; cancer; antisense technology; human; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Phosphorothioate backbone. All cytidines
XX FT are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 15..20
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX XX
XX PN US2004005567-A1.
XX XX
XX PD 08-JAN-2004.
XX XX
XX PF 02-JUL-2002; 2002US-00188779.
XX XX
XX PR 02-JUL-2002; 2002US-00188779.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Dean NM, Freier SM, Dobie KW;
XX XX
XX DR WPI; 2004-081710/08;
XX XX
XX XX New antisense oligonucleotide, having a sequence targeted to a nucleic
XX PT acid encoding cyclin-dependent kinase 4, useful for preparing a
XX PT composition for treating diabetes, infertility or hyperproliferative
XX PT disorder, e.g., cancer.
XX XX
XX PS Example 15; SEQ ID NO 213; 90pp; English.
XX XX
XX CC The invention describes a new antisense oligonucleotide, having a
XX CC sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
XX CC dependent kinase 4, specifically hybridises with the nucleic acid
XX CC encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
XX CC dependent kinase 4. The antisense oligonucleotide is useful for preparing
XX CC a composition for treating diabetes, infertility or hyperproliferative
XX CC disorder, e.g., cancer. This sequence represents a human cyclin dependent
XX CC kinase 4 antisense oligonucleotide.
XX XX
XX SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
XX XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX XX
XX QY 3592 GCTATAGGCATGAAGGAAGT 3611
XX DB ||| ||||| ||||| |||||
XX 20 GCAATTGGCATGAAGGAAT 1
XX XX
XX RESULT 295
XX ADI26888
XX ID ADI26888 standard; DNA; 20 BP.
XX AC
```

```
AC ADI26888;
XX XX
XX DT 22-APR-2004 (first entry)
XX XX
XX DE Cyclin dependent kinase 4 antisense oligonucleotide #54.
XX XX
XX KW cytostatic; antidiabetic; antiinfertility; gene therapy;
XX KW cyclin-dependent kinase 4; diabetes; infertility;
XX KW hyperproliferative disorder; cancer; antisense technology; human; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Phosphorothioate backbone. All cytidines
XX FT are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX FT modified_base 15..20
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX XX
XX PN US2004005567-A1.
XX XX
XX PD 08-JAN-2004.
XX XX
XX PF 02-JUL-2002; 2002US-00188779.
XX XX
XX PR 02-JUL-2002; 2002US-00188779.
XX XX
XX PA (ISIS-) ISIS PHARM INC.
XX XX
XX PI Dean NM, Freier SM, Dobie KW;
XX XX
XX DR WPI; 2004-081710/08.
XX XX
XX XX New antisense oligonucleotide, having a sequence targeted to a nucleic
XX PT acid encoding cyclin-dependent kinase 4, useful for preparing a
XX PT composition for treating diabetes, infertility or hyperproliferative
XX PT disorder, e.g., cancer.
XX XX
XX PS Example 15; SEQ ID NO 73; 90pp; English.
XX XX
XX CC The invention describes a new antisense oligonucleotide, having a
XX CC sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
XX CC dependent kinase 4, specifically hybridises with the nucleic acid
XX CC encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
XX CC dependent kinase 4. The antisense oligonucleotide is useful for preparing
XX CC a composition for treating diabetes, infertility or hyperproliferative
XX CC disorder, e.g., cancer. This sequence represents a human cyclin dependent
XX CC kinase 4 antisense oligonucleotide.
XX XX
XX SQ Sequence 20 BP; 8 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
XX XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX XX
XX QY 3592 GCTATAGGCATGAAGGAAGT 3611
XX DB ||| ||||| ||||| |||||
XX 1 GCAATTGGCATGAAGGAAT 20
XX XX
XX RESULT 296
XX ADJ34054/C
XX ID ADJ34054 standard; DNA; 20 BP.
XX AC ADJ34054;
```

XX XX
DT 22-APR-2004 (first entry)
XX Human polo-like kinase target oligonucleotide SEQ ID NO:114.
DE
XX polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide;
XX cytosolic; antiinflammatory; antimicrobial; antisense gene therapy;
KW kinase inhibitor; hyperproliferative disorder; cancer;
KW non-small cell lung cancer; oesophageal cancer; infection; inflammation;
KW tumour; human; target; ss.
XX Homo sapiens.
OS
XX WO2004011610-A2.
PN
XX 05-FEB-2004.
XX
PD
XX 25-JUL-2003; 2003WO-US023413.
XX
PF
XX 30-JUL-2002; 2002US-00209405.
XX
PR
XX (ISIS-) ISIS PHARM INC.
XX
PA Wyatt JR, Freier SM;
XX WPI; 2004-143840/14.
XX
DR
XX New antisense compounds targeted to nucleic acid molecules encoding polo-
XX like kinase, useful for treating diseases associated with aberrant
PT expression of polo-like kinase, e.g. non-small cell lung cancer or
PT esophageal cancer.
PT
XX Example 15; SEQ ID NO 114; 138pp; English.
PS
XX The present invention describes a compound (I) of 8-80 nucleobases in
XX length targeted to a nucleic acid molecule encoding polo-like kinase,
CC where (I) specifically hybridises with nucleic acid molecule encoding
CC polo-like kinase and inhibits the expression of polo-like kinase, or
CC specifically hybridises with at least an 8-nucleobase portion of a
CC preferred target region on a nucleic acid molecule encoding polo-like
CC kinase. Also described: (1) a composition comprising (I) and a
CC pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-
CC like kinase in cells or tissues comprising contacting the cells or
CC tissues with (I); (3) treating an animal having a disease or condition
CC associated with polo-like kinase comprising administering to the animal a
CC therapeutic or prophylactic amount of (I) so that expression of polo-like
CC kinase is inhibited; and (4) screening for an antisense compound
CC comprising contacting a preferred target region of a nucleic acid
CC molecule encoding polo-like kinase with one or more candidate antisense
CC compounds comprising at least an 8-nucleobase portion which is
CC complementary to the preferred target region, and selecting for one or
CC more candidate antisense compounds which inhibits the expression of a
CC nucleic acid molecule encoding polo-like kinase. (I) has cytosolic,
CC antiinflammatory and antimicrobial activities, and can be used in
CC antisense gene therapy, and as a kinase inhibitor. The antisense
CC oligonucleotides or compounds (I) can be used for inhibiting the
CC expression of polo-like kinase, and for treating diseases or conditions
CC associated with aberrant expression of polo-like kinase, e.g.
CC hyperproliferative disorder such as cancer, including non-small cell lung
CC cancer or oesophageal cancer. The antisense compounds are also useful as
CC research reagents and kits, or in diagnostic, therapeutic and
CC prophylactic applications, e.g. to prevent or delay infection,
CC inflammation or tumour formation. The present sequence represents a human
CC polo-like kinase target oligonucleotide, which is used in an example from
XX the present invention.
SQ Sequence 20 BP; 10 A; 5 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1091 TGTTCCTTCATTTTCCTGG 1110

Db 20 TGGTCTCTCTTTTCCCGG 1
RESULT 297
ADJ33995
ID ADJ33995 standard; DNA; 20 BP.
XX AC ADJ33995;
XX 22-APR-2004 (first entry)
XX Human polo-like kinase antisense oligonucleotide SEQ ID NO:55.
DE
XX polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide;
KW cytosolic; antiinflammatory; antimicrobial; antisense gene therapy;
KW kinase inhibitor; hyperproliferative disorder; cancer;
KW non-small cell lung cancer; oesophageal cancer; infection; inflammation;
KW tumour; human; phosphorothioate; 2'-O-methoxyethyl; ss.
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
WO2004011610-A2.
05-FEB-2004.
25-JUL-2003; 2003WO-US023413.
30-JUL-2002; 2002US-00209405.
XX (ISIS-) ISIS PHARM INC.
XX Wyatt JR, Freier SM;
XX WPI; 2004-143840/14.
XX New antisense compounds targeted to nucleic acid molecules encoding polo-
XX like kinase, useful for treating diseases associated with aberrant
PT expression of polo-like kinase, e.g. non-small cell lung cancer or
PT esophageal cancer.
XX
PS Claim 1; SEQ ID NO 55; 138pp; English.
XX The present invention describes a compound (I) of 8-80 nucleobases in
XX length targeted to a nucleic acid molecule encoding polo-like kinase,
CC where (I) specifically hybridises with nucleic acid molecule encoding
CC polo-like kinase and inhibits the expression of polo-like kinase, or
CC specifically hybridises with at least an 8-nucleobase portion of a
CC preferred target region on a nucleic acid molecule encoding polo-like
CC kinase. Also described: (1) a composition comprising (I) and a
CC pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-
CC like kinase in cells or tissues comprising contacting the cells or
CC tissues with (I); (3) treating an animal having a disease or condition
CC associated with polo-like kinase comprising administering to the animal a
CC therapeutic or prophylactic amount of (I) so that expression of polo-like
CC kinase is inhibited; and (4) screening for an antisense compound
CC comprising contacting a preferred target region of a nucleic acid
CC molecule encoding polo-like kinase with one or more candidate antisense
CC molecule encoding polo-like kinase with one or more candidate antisense

CC compounds comprising at least an 8-nucleobase portion which is
CC complementary to the preferred target region, and selecting for one or
CC more candidate antisense compounds which inhibits the expression of a
CC nucleic acid molecule encoding polo-like kinase. (I) has cytostatic,
CC antiinflammatory and antimicrobial activities, and can be used in
CC antisense gene therapy, and as a kinase inhibitor. The antisense
CC oligonucleotides or compounds (I) can be used for inhibiting the
CC expression of polo-like kinase, and for treating diseases or conditions
CC associated with aberrant expression of polo-like kinase, e.g.
CC hyperproliferative disorder such as cancer, including non-small cell lung
CC cancer or oesophageal cancer. The antisense compounds are also useful as
CC research reagents and kits, or in diagnostic, therapeutic and
CC prophylactic applications, e.g. to prevent or delay infection,
CC inflammation or tumour formation. The present sequence represents a human
CC polo-like kinase chimeric phosphorothioate antisense oligonucleotide,
CC which is used in an example from the present invention.

XX Sequence 20 BP; 0 A; 5 C; 5 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 2.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1091 TGTTCCTTCATTTCCCTGG 1110

DB 1 TGTTCCTTCATTTCCCTGG 20

RESULT 298

ADJ46575/c

ID ADJ46575 standard; DNA; 20 BP.

XX ADJ46575;

AC ADJ46575;

XX 06-MAY-2004 (first entry)

DE Human requiem antisense oligonucleotide ISIS #204782.

XX human; requiem; hyperproliferative disorder; cancer;

KW developmental disorder; infection; inflammation; tumour formation; ss;

KW antisense.

XX Homo sapiens.

OS Synthetic.

XX US2004023385-A1.

PN 05-FEB-2004.

XX 05-AUG-2002; 2002US-00212993.

XX 05-AUG-2002; 2002US-00212993.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Freier SM, Dobie KW;

XX WPI; 2004-142666/14.

DR New antisense compound targeted to a nucleic acid molecule encoding

XX requiem, useful for modulating expression of requiem or for treating

PT cancer or developmental disorders.

XX Example 15; SEQ ID NO 50; 66pp; English.

XX The invention relates to a compound targeted to a nucleic acid molecule

CC encoding requiem which specifically hybridises with the nucleic acid

CC molecule encoding requiem and inhibits the expression of requiem. The

CC compound, particularly the antisense oligonucleotide is useful in

CC modulating the function of nucleic acid molecules encoding requiem. The

CC antisense compound can also be used as research tools and diagnostics. It

CC can also be used as tools in differential and/or combinatorial analyses

CC to elucidate expression patterns of a portion or the entire complement of

CC genes expressed within cells and tissues. The compound can also be used
CC for treating diseases or conditions associated with requiem, preferably
CC hyperproliferative disorder, e.g. cancer or a developmental disorder. The
CC compound can also be used as prophylaxis, e.g. to prevent or delay
CC infection, inflammation or tumour formation. The present sequence
CC represents the human requiem antisense oligonucleotide.

XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 2.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 547 TACAGAAGCTGGCTGTG 566

DB 20 TACAGAAGCTGGCTGTG 1

RESULT 299

ADJ61423

ID ADJ61423 standard; DNA; 20 BP.

XX ADJ61423;

AC ADJ61423;

XX 06-MAY-2004 (first entry)

DE Oligonucleotide associated to IL5R-X61176 #115.

XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;

KW airway inflammation; allergy; asthma; impeded respiration;

KW cystic fibrosis; acute respiratory distress syndrome;

KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;

XX ss.

XX Homo sapiens.

XX WO2004011613-A2.

PN 05-FEB-2004.

XX 25-JUL-2003; 2003WO-US023509.

XX 29-JUL-2002; 2002US-0399076P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;

PI Shahabuddin S, Lu H, Cong H;

XX WPI; 2004-203534/19.

XX Novel single or multiple target oligonucleotide anti-sense to e.g.

XX initiation codons and introns of respiratory disease-relevant genes e.g.,

XX CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory

XX disease e.g., asthma.

XX Claim 2; SEQ ID NO 2279; 85pp; English.

XX The present invention relates to an oligonucleotide anti-sense to e.g.,

XX initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-

XX end of nucleic acid target comprising gene(s) chosen from e.g.

XX interleukin (IL)-4 receptor, IL-5 receptor or salts of the

XX oligonucleotide and optionally surfactant operatively linked to the

XX oligonucleotide. The method is useful for preventing or treating a

XX respiratory or lung disease, which involves administering to the airways

XX of a subject an effective amount of an inhibitor. The oligonucleotide is

XX useful for production of a medicament for the prevention and/or treatment

XX of a respiratory or lung disease. The respiratory or lung disease is

XX chosen from airway inflammation, allergy(ies), asthma, impeded

XX respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases

XX (COPD), allergic rhinitis (AR), acute respiratory distress syndrome

XX (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway

XX obstruction. The present sequence represents an oligonucleotide of the


```
Dh 1 TTGAGGGGACACAGATGTC 20

RESULT 302
ADJ38722
ID ADJ38722 standard; DNA; 20 BP.
XX
XX
AC ADJ38722;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human resistin antisense oligonucleotide seq id 111.
XX
XX antidiabetic; anorectic; cardiant; antiarteriosclerotic;
KW resistin inhibitor; resistin; metabolic disease; diabetes; obesity;
KW atherosclerosis; antisense technology; human; antisense oligonucleotide;
KW ss.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /*mod_base= OTHER
FT /*note= "OTHER= Phosphorothioate backbone. All cytidines
FT modified_base 1..5
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /*mod_base= OTHER
FT /*note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
XX US2004023383-A1.
XX
XX 05-FEB-2004.
XX
XX 31-JUL-2002; 2002US-00210833.
XX
XX 31-JUL-2002; 2002US-00210833.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bhanot S, Freier SM;
XX
XX WPI; 2004-142664/14.
XX
XX New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding resistin, useful for treating a metabolic disorder,
PT e.g. diabetes or obesity, or atherosclerosis.
XX
XX Example 15; SEQ ID NO 111; 75pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted
CC to, and which specifically hybridises with a nucleic acid molecule
CC encoding resistin, and inhibits the expression of resistin. The compound,
CC composition and methods are useful for treating a disease or condition
CC associated with resistin, such as a metabolic disease, e.g. diabetes or
CC obesity, or atherosclerosis. They are also useful in research and
CC diagnostics for modulating the expression of resistin. This sequence
CC represents a human resistin antisense oligonucleotide.
XX
XX Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 547 TACAGAGCTGGTGCTGTG 566
XX |||||
Dh 1 TACAGGACGGGTGGCTGTG 20

RESULT 303
ADJ54308
ID ADJ54308 standard; DNA; 20 BP.
XX
XX
AC ADJ54308;
XX
XX 06-MAY-2004 (first entry)
XX
XX Human B7-1 DNA antisense oligonucleotide #33.
XX
XX Airway hyperresponsiveness; pulmonary inflammation;
KW antisense oligonucleotide; human; B7 protein; B7-1; asthma;
KW antiasthmatic; antiinflammatory; ss.
XX
XX Homo sapiens.
OS
XX
XX US2004023917-A1.
XX
XX 05-FEB-2004.
XX
XX 23-MAY-2003; 2003US-00444206.
XX
XX 31-DEC-1996; 96US-00777266.
XX 04-JUN-1999; 99US-00326186.
XX 25-MAY-2000; 2000WO-US014471.
XX 09-MAY-2001; 2001US-00851871.
XX
XX (BENN/) BENNETT C F.
XX PA (VICK/) VICKERS T A.
XX PA (KARR/) KARRAS J G.
XX
XX Bennett CF, Vickers TA, Karras JG;
XX
XX WPI; 2004-132608/13.
XX
XX Treating airway hyperresponsiveness or pulmonary inflammation comprises
PT administering an antisense compound targeted to a nucleic acid molecule
PT encoding a human B7 protein to the individual.
XX
XX Example 12; SEQ ID NO 128; 182pp; English.
XX
XX The invention relates to a method for treating airway hyperresponsiveness
CC or pulmonary inflammation in an individual comprising administering an
CC antisense compound targeted to a nucleic acid molecule encoding a human
CC B7 protein. The invention also relates to a method of inhibiting
CC expression of a nucleic acid molecule encoding B7-1 or B7-2. The
CC antisense compound is an antisense oligonucleotide which has a modified
CC sugar moiety and nucleobase. The human B7 protein is human B7-1 or B7-2
CC protein or both. The compound is useful for treating airway
CC hyperresponsiveness or pulmonary inflammation, which is associated with
CC asthma, by inhibiting expression of human B7 protein. This sequence
CC represents an antisense oligonucleotide of the invention.
XX
XX Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1317 TTGAGTTTCAAGGTTGCTG 1336
XX |||||
Dh 1 TTTAGTTTCACAGCTTGCTG 20

RESULT 304
ADJ54433/c
ID ADJ54433 standard; DNA; 20 BP.
XX
XX
AC ADJ54433;
XX
XX 06-MAY-2004 (first entry)
XX
```

```

XX DE Human B7-1 DNA antisense oligonucleotide #88.
XX
XX Airway hyperresponsiveness; pulmonary inflammation;
KW antisense oligonucleotide; human; B7 protein; B7-1; asthma;
KW antiasthmatic; antiinflammatory; ss.
XX
XX Homo sapiens.
OS
XX US2004023917-A1.
XX
XX 05-FEB-2004.
XX
XX 23-MAY-2003; 2003US-00444206.
XX
XX 31-DEC-1996; 96US-00777266.
XX 04-JUN-1999; 99US-00326186.
XX 25-MAY-2000; 2000WO-US014471.
XX 09-MAY-2001; 2001US-00851871.
XX
XX (BENN/) BENNETT C F.
XX (VICK/) VICKERS T A.
XX (KARR/) KARRAS J G.
XX
XX Bennett CF, Vickers TA, Karras JG;
XX
XX WPI; 2004-132608/13.
XX
XX Treating airway hyperresponsiveness or pulmonary inflammation comprises
PT administering an antisense compound targeted to a nucleic acid molecule
PT encoding a human B7 protein to the individual.
XX
XX Example 19; SEQ ID NO 253; 182pp; English.
XX
XX The invention relates to a method for treating airway hyperresponsiveness
CC or pulmonary inflammation in an individual comprising administering an
CC antisense compound targeted to a nucleic acid molecule encoding a human
CC B7 protein. The invention also relates to a method of inhibiting
CC expression of a nucleic acid molecule encoding B7-1 or B7-2. The
CC antisense compound is an antisense oligonucleotide which has a modified
CC sugar moiety and nucleobase. The human B7 protein is human B7-1 or B7-2
CC protein or both. The compound is useful for treating airway
CC hyperresponsiveness or pulmonary inflammation, which is associated with
CC asthma, by inhibiting expression of human B7 protein. This sequence
CC represents an antisense oligonucleotide of the invention.
XX
XX Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
SQ
    Query Match          0.4%; Score 15.2; DB 1; Length 20;
    Best Local Similarity 85.0%; Pred. No. 2.3e+02;
    Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3767 GGCTGGGATCCCTCCCTGT 3786
Db 20 GGCTGGCATCCCTCTCCTTT 1

RESULT 305
ADK12305
ID ADK12305 standard; DNA; 20 BP.
XX
XX ADK12305;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Mouse complement component C3 DNA, antisense oligonucleotide #51.
DE
XX
XX Antisense therapy; mouse; complement component C3; autoimmune disorder;
KW multiple sclerosis; infection; atherosclerosis; neuroprotective;
KW antiarteriosclerotic; antimicrobial; antiinflammatory; cytostatic;
KW phosphorothioate; ss.
XX
XX Mus musculus.
OS

```

```

XX Key modified_base Location/Qualifiers
FH 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length at each
FT end. All cytidine residues are 5-methylcytidines"
XX
XX US2004043956-A1.
XX
XX 04-MAR-2004.
XX
XX 18-AUG-2003; 2003US-00642802.
XX
XX 23-OCT-2001; 2001US-00001076.
XX (GRAH/) GRAHAM M J.
XX (WATT/) WATT A T.
XX
XX Graham MJ, Watt AT;
XX
XX WPI; 2004-225730/21.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT complement component C3, useful for treating multiple sclerosis, an
PT infection or atherosclerosis.
XX
XX Claim 3; SEQ ID NO 163; 74pp; English.
XX
XX The present invention relates to antisense compounds targeted to a
CC nucleic acids encoding human and mouse complement component C3. The
CC antisense compound comprises an antisense oligonucleotide that
CC specifically hybridises with the nucleic acid and inhibits the expression
CC of complement component C3 in cells. The antisense oligonucleotide is a
CC chimeric oligonucleotide. The antisense oligonucleotide comprises at
CC least one modified internucleoside linkage, preferably a phosphorothioate
CC linkage. It also comprises at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
CC further comprises at least one modified nucleobase, preferably a 5-
CC methylcytosine. The antisense oligonucleotides are useful for the
CC treatment of diseases such as autoimmune disorders e.g. multiple
CC sclerosis, infections, and atherosclerosis. The present sequence
CC represents an antisense oligonucleotide used in the examples of the
CC present invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
SQ
    Query Match          0.4%; Score 15.2; DB 1; Length 20;
    Best Local Similarity 85.0%; Pred. No. 2.3e+02;
    Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1399 TTACCATGAGTTCAAACTTC 1418
Db 1 TGACCCCTGAGGTCAAACCTTC 20

RESULT 306
ADJ24260/c
ID ADJ24260 standard; DNA; 20 BP.
XX
XX ADJ24260;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human endothelial lipase antisense oligonucleotide, SEQ ID 2658.
DE
XX
XX Antilipaeamic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
KW Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW cardiovascular disorder; metabolic syndrome X; ss.
XX
XX Homo sapiens.
OS

```

```

OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 4 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX WO2004009541-A2.
PN
XX 29-JAN-2004.
XX
XX 18-JUL-2003; 2003WO-US022410.
XX
XX 19-JUL-2002; 2002US-0397106P.
XX (PHAA ) PHARMACIA CORP.
PA
XX Bhat BG;
PI
XX WPI; 2004-132912/13.
DR
XX New antisense oligonucleotide for modulating endothelial lipase
XX expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
XX high density lipoprotein or cardiovascular disorders.
XX Claim 3; SEQ ID NO 2658; 1007pp; English.
XX
XX The present invention relates to antisense oligonucleotides (ADJ21603-
XX ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
XX (ADJ25517), where the antisense oligonucleotide specifically hybridises
XX with and inhibits the expression of EL. The antisense oligonucleotides
XX are useful for modulating the expression of endothelial lipase in cells
XX or tissues to treat diseases associated with EL expression, such as
XX dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
XX disorder or metabolic syndrome X. In addition, the oligonucleotides are
XX used for diagnostics, prophylaxis, or as research reagents or kits.
XX Sequence 20 BP; 10 A; 3 C; 2 G; 5 T; 0 U; 0 Other;
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1897 AGAATGACCTTCTGTACT 1916
DB 20 AGAATGATTTCTTTGTACT 1

RESULT 307
ADJ21649
ID ADJ21649 standard; DNA; 20 BP.
XX
XX AC ADJ21649;
XX
XX 20-MAY-2004 (first entry)
XX
XX Human endothelial lipase antisense oligonucleotide, SEQ ID 47.
XX
XX Antilipaeamic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
XX Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
XX cardiovascular disorder; metabolic syndrome X; ss.
XX Homo sapiens.
XX Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 4 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX WO2004009541-A2.
PN

OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 4 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX WO2004009541-A2.
PN

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XX 29-JAN-2004.
PD
XX
XX 18-JUL-2003; 2003WO-US022410.
PF
XX
XX 19-JUL-2002; 2002US-0397106P.
PR
XX
XX (PHAA ) PHARMACIA CORP.
PA
XX
XX Bhat BG;
PI
XX
XX WPI; 2004-132912/13.
DR
XX
XX New antisense oligonucleotide for modulating endothelial lipase
PT expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT high density lipoprotein or cardiovascular disorders.
PT
XX
XX Claim 3; SEQ ID NO 2974; 1007pp; English.
PS
XX
XX The present invention relates to antisense oligonucleotides (ADJ21603-
CC ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC with and inhibits the expression of EL. The antisense oligonucleotides
CC are useful for modulating the expression of endothelial lipase in cells
CC or tissues to treat diseases associated with EL expression, such as
CC dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC used for diagnostics, prophylaxis, or as research reagents or kits.
XX
XX Sequence 20 BP; 11 A; 3 C; 2 G; 4 T; 0 U; 0 Other;
SQ
    Query Match      0.4%; Score 15.2; DB 1; Length 20;
    Best Local Similarity 85.0%; Pred. No. 2.3e+02;
    Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1898 GAATGACTTGTCTGTGACTT 1917
DB 20 GAATGATTTCTTGTGACTT 1
    RESULT 309
    ADK79428/c
    ID ADK79428 standard; DNA; 20 BP.
    AC ADK79428;
    XX
    XX 20-MAY-2004 (first entry)
    DT
    DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #5762.
    XX
    KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
    KW diabetic neuropathy; arthritic pain; migraine headache;
    KW infantile epilepsy; ataxia; ss.
    XX
    OS Synthetic.
    OS
    PN WO2004016754-A2.
    PD
    XX
    XX 26-FEB-2004.
    XX
    PF 14-AUG-2003; 2003WO-US025465.
    XX
    PR 14-AUG-2002; 2002US-0403416P.
    XX
    XX (PHAA ) PHARMACIA CORP.
    PA
    XX
    XX Roberds SL;
    PI
    XX
    XX WPI; 2004-203785/19.
    DR
    XX
    XX New antisense compound targeted to a nucleic acid molecule encoding
    PT Nav1.3, useful for treating a disease or condition associated
    PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
```

```
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 6762; 417pp; English.
PS
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 3 A; 5 C; 1 G; 11 T; 0 U; 0 Other;
SQ
    Query Match      0.4%; Score 15.2; DB 1; Length 20;
    Best Local Similarity 85.0%; Pred. No. 2.3e+02;
    Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 967 ACTTGGAAAAGCTTTCACAAA 986
DB 20 ACAAGGAAAAGTTTGAGAAA 1
    RESULT 310
    ADK78831
    ID ADK78831 standard; DNA; 20 BP.
    XX
    AC ADK78831;
    XX
    XX 20-MAY-2004 (first entry)
    DT
    DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6165.
    XX
    KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
    KW diabetic neuropathy; arthritic pain; migraine headache;
    KW infantile epilepsy; ataxia; ss.
    XX
    OS Synthetic.
    OS
    PN WO2004016754-A2.
    PD
    XX
    XX 26-FEB-2004.
    XX
    PF 14-AUG-2003; 2003WO-US025465.
    XX
    PR 14-AUG-2002; 2002US-0403416P.
    XX
    XX (PHAA ) PHARMACIA CORP.
    PA
    XX
    XX Roberds SL;
    PI
    XX
    XX WPI; 2004-203785/19.
    DR
    XX
    XX New antisense compound targeted to a nucleic acid molecule encoding
    PT Nav1.3, useful for treating a disease or condition associated
    PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
    PT disorder, or ataxia.
    XX
    XX Claim 4; SEQ ID NO 6165; 417pp; English.
    PS
    XX
    XX The present invention relates to an antisense compound targeted to a
    CC nucleic acid molecule encoding Nav1.3, where the antisense compound
    CC specifically hybridizes with and inhibits the expression of Nav1.3. The
    CC compound and composition are useful for treating a disease or condition
    CC associated with Nav1.3, e.g. pain including but not limited to
    CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
```

CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1080 TGTTCGACAAATGTTCTTC 1099
 DB 1 TGTTCGACCAATGATCTCC 20

RESULT 311
 ADK73906
 ID ADK73906 standard; DNA; 20 BP.

XX AC ADK73906;
 XX DT 20-MAY-2004 (first entry)

XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1240.

XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 XX KW diabetic neuropathy; arthritic pain; migraine headache;
 XX KW infantile epilepsy; ataxia; ss.

XX OS Synthetic.

XX PN WO2004016754-A2.

XX PD 26-FEB-2004.

XX PF 14-AUG-2003; 2003WO-US025465.

XX PR 14-AUG-2002; 2002US-0403416P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Roberds SL;

XX DR WPI; 2004-203785/19.

XX PT New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.

XX PS Claim 4; SEQ ID NO 1240; 417pp; English.

XX CC The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 5 A; 2 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 256 AGTGGTTCCTAATATTACT 275
 DB 1 AGTGGTTCCTAATATTATT 20

RESULT 312
 ADK77560
 ID ADK77560 standard; DNA; 20 BP.

XX AC ADK77560;

XX DT 20-MAY-2004 (first entry)

XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #4894.

XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 XX KW diabetic neuropathy; arthritic pain; migraine headache;
 XX KW infantile epilepsy; ataxia; ss.

XX OS Synthetic.

XX PN WO2004016754-A2.

XX PD 26-FEB-2004.

XX PF 14-AUG-2003; 2003WO-US025465.

XX PR 14-AUG-2002; 2002US-0403416P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Roberds SL;

XX DR WPI; 2004-203785/19.

XX PT New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.

XX PS Claim 4; SEQ ID NO 4894; 417pp; English.

XX CC The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC pain from burns, trigeminal neuropathy, arthritic pain, acute pain,
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 8 A; 0 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 940 TTCTGGGGAATTTAGAAAT 959
 DB 1 TTATGGGGAATTTATGAAT 20

```
RESULT 313
ADK81604
ID ADK81604 standard; DNA; 20 BP.
XX
XX ADK81604;
AC
XX 20-MAY-2004 (first entry)
DT
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #8938.
DE
XX
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
OS
XX WO2004016754-A2.
PN
XX 26-FEB-2004.
PD
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 8938; 417pp; English.
PS
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 10 A; 4 C; 5 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 485 AATATTGACAGGAACCCCA 504
| | | | | | | | | | | | | | | | | |
Db 1 AATAGAGACAGGAAGCCCA 20

RESULT 314
ADK76828
ID ADK76828 standard; DNA; 20 BP.
XX
XX ADK76828;
AC
XX 20-MAY-2004 (first entry)
DT
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #4162.
DE
XX
```

```
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
OS
XX WO2004016754-A2.
PN
XX 26-FEB-2004.
PD
XX
XX 14-AUG-2003; 2003WO-US025465.
PF
XX 14-AUG-2002; 2002US-0403416P.
PR
XX (PHAA ) PHARMACIA CORP.
PA
XX Robert's SL;
PI
XX WPI; 2004-203785/19.
DR
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 4162; 417pp; English.
PS
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 5 A; 3 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1078 ATTGTTTCACAAATGTTTCT 1097
| | | | | | | | | | | | | | | | | |
Db 1 AGTGTTTGACCAATGTAICT 20

RESULT 315
ADK73795
ID ADK73795 standard; DNA; 20 BP.
XX
XX ADK73795;
AC
XX 20-MAY-2004 (first entry)
DT
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1129.
DE
XX
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
OS
XX WO2004016754-A2.
PN
XX 26-FEB-2004.
PD
XX
```

PF 14-AUG-2003; 2003WO-US025465.
 PR 14-AUG-2002; 2002US-0403416P.
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Roberds SL;
 PI
 XX WPI; 2004-203785/19.
 DR
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.
 PT
 XX Claim 4; SEQ ID NO 1129; 417pp; English.
 PS
 XX The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.
 XX
 XX Sequence 20 BP; 4 A; 2 C; 5 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 1074 TTTAATTGTTTGCACAAATGT 1093
 DB 1 TTTGAGTGTTCACCAATGT 20
 RESULT 316
 ADK74411
 ID ADK74411 standard; DNA; 20 BP.
 XX
 AC ADK74411;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1745.
 XX
 KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.
 XX
 OS Synthetic.
 XX
 XX WO2004016754-A2.
 PN
 XX 26-FEB-2004.
 PD
 XX
 PF 14-AUG-2003; 2003WO-US025465.
 PR
 XX 14-AUG-2002; 2002US-0403416P.
 PR (PHAA) PHARMACIA CORP.
 XX
 XX Roberds SL;
 PI
 XX WPI; 2004-203785/19.
 DR
 XX

PT New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.
 XX
 PS Claim 4; SEQ ID NO 1745; 417pp; English.
 XX
 XX The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.
 XX
 XX Sequence 20 BP; 5 A; 2 C; 5 G; 8 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 254 GGAGGTGGTTCCTATATTA 273
 DB 1 GTAGGTGGTTCCTATATTA 20
 RESULT 317
 ADK19046
 ID ADK19046 standard; DNA; 20 BP.
 XX
 AC ADK19046;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Immunostimulatory nucleic acid #93.
 XX
 KW immunostimulatory nucleic acid; asthma; allergy; cancer;
 KW infectious disease; autoimmune disease; airway remodeling;
 KW chronic obstructive pulmonary disease; asthma; IL-6; interleukin-6;
 KW TNFalpha; tumour necrosis factor alpha; IFNalpha; interferon-alpha;
 KW IFNgamma; interferon-gamma; IP-10; interferon inducible protein;
 KW viral infection; bacteria infection; parasitic infection; ss.
 XX
 OS Synthetic.
 XX
 XX WO2004016805-A2.
 PN
 XX 26-FEB-2004.
 PD
 XX
 PF 19-AUG-2003; 2003WO-US025935.
 PR
 XX 19-AUG-2002; 2002US-0404479P.
 PR 19-AUG-2002; 2002US-0404820P.
 PR 27-NOV-2002; 2002US-0429701P.
 PR 14-FEB-2003; 2003US-0447377P.
 XX
 PA (COLE-) COLEY PHARM GROUP INC.
 PA (COLE-) COLEY PHARM GMBH.
 XX
 PI Krieg AM, Samulowitz U, Vollmer J, Uhlmann E, Jurk M, Lipford G;
 PI Rankin R;
 XX
 DR WPI; 2004-257200/24.
 XX
 XX New immunostimulatory nucleic acid molecule having pyrimidine-purine
 PT dinucleotide and a chimeric backbone, useful in treating and preventing

PT asthma, allergy, cancer, infectious disease, autoimmune disease or airway
PT remodeling.
XX
PS Claim 4; SEQ ID NO 93; 276pp; English.
XX
XX The invention relates to an immunostimulatory nucleic acid molecule
CC comprising an internal pyrimidine-purine (YZ) dinucleotide and chimeric
CC backbone, where one internal YZ dinucleotide has a phosphodiester(-like)
CC internucleotide linkage, where optionally each additional internucleotide
CC dinucleotide has a phosphodiester(-like) or stabilised internucleotide
CC linkage, where other internucleotide linkages are stabilised. The
CC oligonucleotide is useful in stimulating or modulating an immune
CC response. The medicament shifts the immune response to a Th1 biased
CC response from a Th2 biased response. The oligonucleotide is also useful
CC in the manufacture of a medicament for treating asthma, allergy, cancer,
CC infectious disease, autoimmune disease, airway remodeling or chronic
CC obstructive pulmonary disease or in treating a subject who is a smoker or
CC who is free of symptoms of asthma. The oligonucleotide is useful in
CC inducing cytokine expression, e.g. IL-6 (interleukin-6), TNFalpha (tumour
CC necrosis factor alpha), IFNalpha (interferon-alpha), IFNgamma (interferon
CC gamma) and IP-10 (interferon inducible protein). The oligonucleotide is
CC also useful in treating and preventing infections caused by viruses,
CC bacteria and parasites. The present sequence represents an
CC immunostimulatory nucleic acid.
XX
SQ Sequence 20 BP; 0 A; 2 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3326 TTTTCATTTTTCCTCTT 3345
Db 1 TTTTCGTTTTTTCGTTT 20

RESULT 318
AD045397/C
ID AD045397 standard; DNA; 20 BP.
XX
AC AD045397;
XX
XX 15-JUL-2004 (first entry)
DT
DE Human oligonucleotide #763.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
XX US2004049022-A1.
PN
XX 11-MAR-2004.
PD
XX 25-JUL-2003; 2003US-00627930.
PF
XX 23-APR-2002; 2002WO-US013135.
PR
XX 23-APR-2002; 2002WO-US013143.
PR
XX (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.

PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-293804/27.
DR
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCRI,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
XX Claim 2; SEQ ID NO 763; 174pp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCRI, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3184 TCTCCTTACAGAGGTTAAAG 3203
Db 20 TCTCCTTGACAGAGGCTGAAG 1

RESULT 319
AD045910
ID AD045910 standard; DNA; 20 BP.
XX
AC AD045910;
XX
XX 15-JUL-2004 (first entry)
DT
DE Human oligonucleotide #1276.
XX
XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX

PN US2004049022-A1.
 XX 11-MAR-2004.
 PD
 XX 25-JUL-2003; 2003US-00627930.
 PF
 XX 23-APR-2002; 2002WO-US0131135.
 XX 23-APR-2002; 2002WO-US0131143.
 PR
 XX (NYCE/) NYCE J W.
 PA (SAND/) SANDRASAGRA A.
 PA (TANG/) TANG L.
 PA (AGUI/) AGUILAR D.
 PA (MILL/) MILLER S.
 PA (SHAH/) SHAHABUDDIN S.
 PA (LUHH/) LU H.
 PA (CONG/) CONG H.
 XX
 XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX WPI; 2004-293804/27.
 DR
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
 PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
 PT asthma.
 XX
 PS Claim 2; SEQ ID NO 1277; 174pp; English.
 XX
 CC The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
 CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC tryptase a, trypsinase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 5 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3750 TTATGGGACACACATGCG 3769
 Db 1 TTGAGGGGACACACATGTC 20
 RESULT 320
 ID ADO46813
 XX ADO46813 standard; DNA; 20 BP.
 AC
 XX ADO46813;
 DT 15-JUL-2004 (first entry)

XX Human oligonucleotide #2179.
 DE
 XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
 KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
 KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
 KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
 KW asthma; lung allergy; inflammation; inflammatory disease;
 KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
 KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
 KW acute respiratory distress syndrome; pulmonary hypertension;
 KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
 XX
 OS Homo sapiens.
 XX
 PN US2004049022-A1.
 PD 11-MAR-2004.
 XX 25-JUL-2003; 2003US-00627930.
 PF
 XX 23-APR-2002; 2002WO-US0131135.
 PR 23-APR-2002; 2002WO-US0131143.
 XX (NYCE/) NYCE J W.
 PA (SAND/) SANDRASAGRA A.
 PA (TANG/) TANG L.
 PA (AGUI/) AGUILAR D.
 PA (MILL/) MILLER S.
 PA (SHAH/) SHAHABUDDIN S.
 PA (LUHH/) LU H.
 PA (CONG/) CONG H.
 XX
 XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 XX WPI; 2004-293804/27.
 DR
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
 PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
 PT asthma.
 XX
 PS Claim 2; SEQ ID NO 2279; 174pp; English.
 XX
 CC The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
 CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.
 XX
 SQ Sequence 20 BP; 9 A; 6 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15.2; DB 1; Length 20;


```

FH Key      Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2004110159-A1.
XX
XX 10-JUN-2004.
XX
XX 10-DEC-2002; 2002US-00317277.
XX
XX 10-DEC-2002; 2002US-00317277.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW;
XX
XX WPI; 2004-440347/41.
XX
XX New antisense oligonucleotides for modulating estrogen-responsive finger
XX protein expression, useful for diagnosing, preventing or treating
XX hyperproliferative disorders.
XX
XX Example 15; SEQ ID NO 149; 65pp; English.
XX
XX The invention describes a compound 8-80 nucleobases in length targeted to
XX a nucleic acid molecule encoding estrogen-responsive finger protein. The
XX compound specifically hybridises with the nucleic acid molecule encoding
XX oestrogen-responsive finger protein (which comprises a sequence of 24295
XX bp fully defined in the specification) and inhibits the expression of
XX estrogen-responsive finger protein. Also described are: a method of
XX inhibiting the expression of estrogen-responsive finger protein in cells
XX or tissues; a method of screening for a modulator of estrogen-responsive
XX finger protein; a diagnostic method for identifying a disease state; a
XX kit or assay device comprising the above compound; and a method of
XX treating an animal having a disease or condition associated with estrogen
XX responsive finger protein. The antisense oligonucleotide is useful for
XX inhibiting the expression of estrogen-responsive finger protein in cells
XX or tissues to prevent or treat diseases associated with aberrant
XX oestrogen-responsive finger protein expression, such as
XX hyperproliferative disorders. In addition, the compound is used for
XX diagnostics, prophylaxis, or as research reagents or kits. This sequence
XX represents a human estrogen-responsive finger protein antisense
XX oligonucleotide.
XX
XX Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 2479 AGAAGGTGGAGAACCCCTG 2498
Db 1 ATRACGTGGAGAAACCCCTG 20
XX
RESULT 325
ADP49542
ID ADP49542 standard; DNA; 20 BP.
XX
XX ADP49542;
XX
XX 26-AUG-2004 (first entry)

```

```

XX
DE Human BAF53 antisense oligonucleotide ISIS280335.
XX
KW Human; ss; antisense; chromatin; BAF complex; BRG1/brm-associated factor;
KW BAF53; BRG1-associated factor 53kDa; cancer; tumour;
KW actin-related protein; hyperproliferative disorder.
XX
OS Homo sapiens.
XX
XX Key      Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone and all cytidines are 5
FT -methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl residue"
XX
XX US2004110147-A1.
XX
XX 10-JUN-2004.
XX
XX 09-DEC-2002; 2002US-00316243.
XX
XX 09-DEC-2002; 2002US-00316243.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Dobie KW, Jain R;
XX
XX WPI; 2004-440336/41.
XX
XX New oligonucleotide compound that inhibits expression of BAF53, useful
XX for preparing a composition for treating hyperproliferative disorder,
XX e.g. cancer.
XX
XX Example 15; SEQ ID NO 29; 72pp; English.
XX
XX The invention relates to a compound, having a sequence comprising 8-80 bp
XX targeted to a nucleic acid encoding BAF53 (a member of the BAF complex
XX (BRG1/brm-associated factor), BRG1-associated factor 53kDa which is an
XX actin-related protein), specifically hybridises with the nucleic acid
XX encoding BAF53 comprising 28001-bp sequence (derived from human
XX chromosome 3) and inhibits expression of BAF53, i.e. an antisense
XX oligonucleotide. Also included are inhibiting the expression of BAF53 in
XX cells or tissues, screening for a modulator of BAF53, a diagnostic method
XX for identifying a disease state, a kit or assay device comprising the
XX compound and treating an animal having a disease or condition associated
XX with BAF53. The oligonucleotide compound is useful for preparing a
XX composition for treating hyperproliferative disorder), e.g. cancer or a
XX tumour. The present sequence is an antisense oligonucleotide targeting
XX human BAF53.
XX
XX Sequence 20 BP; 2 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.4%; Score 15.2; DB 1; Length 20;
XX Best Local Similarity 85.0%; Pred. No. 2.3e+02;
XX Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 3438 ACTCTGTCACTTTGTCACTC 3457
Db 1 ACTCTGTCACTTTCTCTCTC 20
XX
RESULT 326
ADP49620/c
ID ADP49620 standard; DNA; 20 BP.

```

XX ADP49620;
 AC 26-AUG-2004 (first entry)
 DE Human BAF53 antisense oligonucleotide target region #10.
 XX Human; ds; antisense; chromatin; BAF complex; BRG1/brm-associated factor;
 KW BAF53; BRG1-associated factor 53kDa; cancer; tumour;
 KW actin-related protein; hyperproliferative disorder; chromosome 3.
 XX Homo sapiens.
 OS US2004110147-A1.
 PN 10-JUN-2004.
 XX 09-DEC-2002; 2002US-00316243.
 PF 09-DEC-2002; 2002US-00316243.
 PR (ISIS-) ISIS PHARM INC.
 XX Dobie KW, Jain R;
 PI WPI; 2004-440336/41.
 DR New oligonucleotide compound that inhibits expression of BAF53, useful
 PT for preparing a composition for treating hyperproliferative disorder,
 FT e.g. cancer.
 XX Example 15; SEQ ID NO 107; 72pp; English.
 PS The invention relates to a compound, having a sequence comprising 8-80 bp
 CC targeted to a nucleic acid encoding BAF53 (a member of the BAF complex
 CC (BRG1/brm-associated factor), BRG1-associated factor 53kDa which is an
 CC actin-related protein), specifically hybridises with the nucleic acid
 CC encoding BAF53 comprising 28001-bp sequence (derived from human
 CC chromosome 3) and inhibits expression of BAF53, i.e. an antisense
 CC oligonucleotide. Also included are inhibiting the expression of BAF53 in
 CC cells or tissues, screening for a modulator of BAF53, a diagnostic method
 CC for identifying a disease state, a kit or assay device comprising the
 CC compound and treating an animal having a disease or condition associated
 CC with BAF53. The oligonucleotide compound is useful for preparing a
 CC composition for treating hyperproliferative disorder, e.g. cancer or a
 CC tumour. The BAF53 gene is located on chromosome 3. The present sequence
 CC is a BAF53 genomic DNA target sequence for an antisense oligonucleotide.
 XX Sequence 20 BP; 9 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 3438 ACTCTGTCACCTTTGTCACTC 3457
 DB 20 ACTCTGTCACCTTTGTCCTC 1
 RESULT 327
 ADP49161
 ID ADP49161 standard; DNA; 20 BP.
 XX ADP49161;
 AC ADP49161;
 XX 09-SEP-2004 (first entry)
 DT Human nicotinic receptor alpha 7 antisense nested PCR primer.
 DE ss; proinflammatory cytokine; appendicitis; cholinergic agonist;
 XX alpha-7 nicotinic receptor; antiinflammatory; gastrointestinal;
 KW antitumor; hepatotropic; virucide; antiasthmatic; antiallergic;
 KW antibacterial; immunosuppressive; vasotropic; vulnerary; antipyretic;

KW immunomodulator; gynaecological; respiratory; CNS; anti-HIV; fungicide;
 KW antimalarial; antianginal; cardiac; antiarteriosclerotic; thrombolytic;
 KW antirheumatic; neuroprotective; analgesic; muscular; antiarthritic;
 KW ophthalmological; cytostatic; osteopathic; antigout; antithyroid;
 KW dermatological; nephrotropic; uropathic; nootropic; antidiabetic;
 KW antipsoriatic; gastrointestinal disease; systemic disease;
 KW local inflammatory disease; urogenital system; respiratory system;
 KW infection; dermatological disease; skin condition;
 KW cardiovascular system disorder; central nervous system;
 KW peripheral nervous system; bone; joint; muscle; connective tissue;
 KW autoimmune disorder; inflammatory disorder; cancer; tumour;
 KW proliferative disorder; primer; nested PCR; nicotinic receptor;
 KW alpha 1 subunit.
 XX Homo sapiens.
 OS WO2004052365-A2.
 PN 24-JUN-2004.
 XX 05-DEC-2003; 2003WO-US038708.
 PF 06-DEC-2002; 2002US-0431650P.
 PR (NSHO-) NORTH SHORE-LONG ISLAND JEWISH RES.
 XX Tracey KJ, Wang H;
 PI WPI; 2004-468700/44.
 DR Treatment of a condition e.g. allergy mediated by release of
 PT proinflammatory cytokine involves treating a patient with a cholinergic
 PT agonist selective for an alpha-7 nicotinic receptor to decrease the
 PT released amount of the cytokine.
 XX Example 1; Page 40; 75pp; English.
 XX The invention relates to a novel method for treatment of a patient
 CC suffering from a condition mediated by release of proinflammatory
 CC cytokine e.g. appendicitis involving treating a patient with a
 CC cholinergic agonist (a1) selective for an alpha-7 nicotinic receptor to
 CC decrease the amount of the proinflammatory cytokine which is released
 CC from a macrophage. A cholinergic agonist has antiinflammatory,
 CC gastrointestinal, antitumor, hepatotropic, virucide, antiasthmatic,
 CC antiallergic, antibacterial, immunosuppressive, vasotropic, vulnerary,
 CC antipyretic, immunomodulator, gynaecological, respiratory, CNS, anti-HIV,
 CC fungicide, antimalarial, antianginal, cardiac, antiarteriosclerotic,
 CC thrombolytic, antirheumatic, neuroprotective, analgesic, muscular,
 CC antiarthritic, ophthalmological, cytostatic, osteopathic, antigout,
 CC antithyroid, dermatological, nephrotropic, uropathic, nootropic,
 CC antidiabetic, and antipsoriatic activity. A compound of the invention is
 CC useful for the treatment of diseases involving the gastrointestinal tract
 CC and associated tissues, systemic or local inflammatory diseases and
 CC conditions, diseases involving the urogenital system and associated
 CC tissues, diseases involving the respiratory system and associated
 CC tissues, diseases arising from infection by various viruses, bacteria,
 CC fungi, and protozoal and multicellular parasites, dermatological diseases
 CC and conditions of the skin, diseases involving the cardiovascular system
 CC and associated tissues, diseases involving the central or peripheral
 CC nervous system and associated tissues, diseases of the bones, joints,
 CC muscles and connective tissues, autoimmune and inflammatory disorders, as
 CC well as various cancers, tumours and proliferative disorders. The present
 CC sequence represents a nested PCR primer used in the invention to amplify
 CC a subunit of a nicotinic receptor.
 XX Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2476 TGCAGAGGTGGAGAGACC 2495
 ||||| ||||| |||||

```

Db      1  TGCAGATGATGGTGAAGACC 20

RESULT 328
ADP84370/c
ID  ADP84370 standard; DNA; 20 BP.
XX
AC  ADP84370;
XX
DT  23-SEP-2004 (first entry)
XX
DE  5' donor site at the exon 9 splice junction of human AAA1 DNA.
XX
SS; AST-1; asthma; IGE mediated disease; human; GPRA;
KW  G-protein coupled receptor for asthma susceptibility; AAA1;
KW  asthma associated alternatively spliced gene 1;
KW  chronic obstructive pulmonary disease; cancer; rhinitis; dermatitis;
KW  cytostatic; antiasthmatic; transgenic; asthma locus-1.
XX
OS  Homo sapiens.
XX
PN  WO2004056866-A1.
XX
PD  08-JUL-2004.
XX
PF  19-DEC-2003; 2003WO-FI000973.
XX
PR  20-DEC-2002; 2002US-0435846P.
PR  03-JAN-2003; 2003US-0437895P.
PR  26-MAR-2003; 2003US-0458767P.
PR  09-JUL-2003; 2003US-0486000P.
XX
PA  (GENE-) GENEOS OY.
XX
Laitinen T, Kere J, Laitinen LA, Polvi A, Maekelae S, Vendelin J;
PI  Fulkkinen V, Salmikangas P;
XX
WPI; 2004-500286/47.
XX
New GPRA polypeptides, useful in preparing a composition for diagnosing,
PT  treating or preventing asthma, other IGE-mediated disease, chronic
PT  obstructive pulmonary disease or cancer.
XX
Example 7; Page 83; 265pp; English.
XX
This invention relates to the identification of a novel susceptibility
CC  locus AST-1 for asthma and other IGE mediated diseases mapped to the
CC  human chromosome 7p14-p15. Specifically, it refers to two overlapping
CC  genes namely GPRA (G-protein coupled receptor for asthma susceptibility)
CC  and AAA1 (asthma associated alternatively spliced gene 1). The present
CC  invention describes identifying single nucleotide polymorphisms, as well
CC  as insertion or deletion polymorphisms, occurring at different positions
CC  in the AST-1 locus, and furthermore providing vectors, host cells,
CC  primers and probes in order to determine the status of an individual.
CC  Accordingly, it provides a kit to diagnose or assess predisposition to
CC  asthma, chronic obstructive pulmonary disease or cancer and other IGE
CC  mediated diseases including rhinitis and dermatitis, such that derived
CC  pharmaceutical compositions exhibit cytostatic and antiasthmatic
CC  activities. Furthermore, it provides a transgenic animal comprising the
CC  asthma locus-1 (AST-1) DNA. This oligonucleotide sequence is a 5' splice
CC  junction of the human AAA1 gene, given in Table 11 of the invention.
XX
Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. NO. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY  2375 GTCCAGACACTTCATCCAGA 2394
      |||||
Db      20 GTCCAGACACTTCATGGAGA 1

RESULT 329
ADK22657
ID  ADK22657 standard; DNA; 20 BP.
XX
AC  ADK22657;
XX
DT  18-NOV-2004 (first entry)
XX
DE  Acyl-coenzyme A synthetase 1, ACS1, antisense oligonucleotide #2734.
XX
acyl-coenzyme A synthetase 1; ACS1; diabetes; obesity;
KW  metabolic syndrome X; cardiovascular disorder; cancer; infection;
KW  inflammation; tumour; antisense; ss.
XX
OS  Synthetic.
XX
PN  WO2004016749-A2.
XX
PD  26-FEB-2004.
XX
PF  14-AUG-2003; 2003WO-US025389.
XX
PR  14-AUG-2002; 2002US-0403591P.
XX
PA  (PHAA ) PHARMACIA CORP.
XX
Ross SA;
PI
WPI; 2004-203782/19.
XX
New antisense compounds targeted to nucleic acid molecules encoding acyl-
PT  coenzyme A synthetase 1 (ACS1), useful for treating diseases or
PT  conditions associated with aberrant expression of ACS1, e.g. diabetes,
PT  obesity or cancer.
XX
Claim 3; SEQ ID NO 2734; 940pp; English.
XX
The invention relates to an antisense compound targeted to a nucleic acid
CC  molecule encoding acyl-coenzyme A synthetase 1 (ACS1). The antisense
CC  compound specifically hybridises with and inhibits the expression of
CC  ACS1. The antisense oligonucleotides or compounds are useful for
CC  inhibiting the expression of acyl-coenzyme A synthetase 1 (ACS1), and for
CC  treating diseases or conditions associated with aberrant expression of
CC  ACS1, e.g. diabetes, obesity, metabolic syndrome X, cardiovascular
CC  disorder or cancer. The antisense compounds are also useful as research
CC  reagents and kits, or in diagnostic, therapeutic and prophylactic
CC  applications, e.g. to prevent or delay infection, inflammation or tumour
CC  formation. The present sequence represents an acyl-coenzyme A synthetase
CC  1, ACS1, antisense oligonucleotide.
XX
Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match      0.4%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. NO. 2.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY  396 CCAGAACTTCAGGTCGTGGA 415
      |||||
Db      1 CAAGATCTTCAGGTCGTGGA 20

RESULT 330
ADS12549/c
ID  ADS12549 standard; DNA; 20 BP.
XX
AC  ADS12549;
XX
DT  16-DEC-2004 (first entry)
XX
DE  PCR primer E2F used to amplify murine 20-HSD DNA Seq 3.
XX
PCR; ss; 20 alpha-hydration steroid dehydrogenase; 20-HSD;
KW  progesterone metabolism; animal model; miscarriage; livestock;

```

KW reproductive dysbolism; primer.
 OS Rattus sp.
 XX JP2004261075-A.
 PN 24-SEP-2004.
 PD
 XX 28-FEB-2003; 2003JP-00054612.
 XX 28-FEB-2003; 2003JP-00054612.
 PR
 PA (UYTY) UNIV TOKYO.
 XX
 XX WPI; 2004-665472/65.
 DR
 XX New gene encoding a protein exhibiting 20(alpha)-hydration steroid
 PT dehydrogenation enzyme activity, useful for metabolizing progesterone to
 PT inactive 20(alpha)-dihydroprogesterone.
 XX
 XX Disclosure; SEQ ID NO 3; 43pp; Japanese.
 PS This invention relates to a novel gene that encodes a protein exhibiting
 CC 20 alpha-hydration steroid dehydrogenase (20-HSD) activity, an enzyme
 CC involved in progesterone metabolism. Specifically, it refers to a mouse
 CC animal model that lacks the gene encoding this enzyme, and hence provides
 CC a model that can be used for the study of miscarriage resulting from the
 CC progesterone dysbolism of a parent or offspring. The present invention
 CC describes progesterone dysbolism as a cause of miscarriage in meal
 CC resource animals in the livestock farming industry, such that it provides
 CC a route to investigate a treatment method and/ or an early check up
 CC method with respect to reproductive disturbances occurring in these
 CC animals. This oligonucleotide sequence is a PCR primer given in an
 CC exemplification of the invention.
 XX
 XX Sequence 20 BP; 9 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1882 TCTTAATCTTACTCAGAAT 1901
 Db 20 TCTTCAATCTTGCTTAGAAT 1
 RESULT 331
 ADS12558
 ID ADS12558 standard; DNA; 20 BP.
 XX
 AC ADS12558;
 XX
 DT 16-DEC-2004 (first entry)
 XX
 DE PCR primer E2R used to amplify murine 20-HSD DNA Seq 12.
 XX
 XX PCR; ss; 20 alpha-hydration steroid dehydrogenase; 20-HSD;
 KW progesterone metabolism; animal model; miscarriage; livestock;
 KW reproductive dysbolism; primer.
 XX
 OS Mus musculus.
 XX
 PN JP2004261075-A.
 XX
 PD 24-SEP-2004.
 XX
 XX 28-FEB-2003; 2003JP-00054612.
 XX 28-FEB-2003; 2003JP-00054612.
 PR
 PA (UYTY) UNIV TOKYO.
 XX
 XX WPI; 2004-665472/65.
 DR
 XX New gene encoding a protein exhibiting 20(alpha)-hydration steroid
 PT dehydrogenation enzyme activity, useful for metabolizing progesterone to
 PT inactive 20(alpha)-dihydroprogesterone.
 XX
 XX Disclosure; SEQ ID NO 3; 43pp; Japanese.
 PS This invention relates to a novel gene that encodes a protein exhibiting
 CC 20 alpha-hydration steroid dehydrogenase (20-HSD) activity, an enzyme
 CC involved in progesterone metabolism. Specifically, it refers to a mouse
 CC animal model that lacks the gene encoding this enzyme, and hence provides
 CC a model that can be used for the study of miscarriage resulting from the
 CC progesterone dysbolism of a parent or offspring. The present invention
 CC describes progesterone dysbolism as a cause of miscarriage in meal
 CC resource animals in the livestock farming industry, such that it provides
 CC a route to investigate a treatment method and/ or an early check up
 CC method with respect to reproductive disturbances occurring in these
 CC animals. This oligonucleotide sequence is a PCR primer given in an
 CC exemplification of the invention.
 XX
 XX Sequence 20 BP; 9 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15.2; DB 1; Length 20;
 Best Local Similarity 85.0%; Pred. No. 2.3e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1882 TCTTAATCTTACTCAGAAT 1901
 Db 20 TCTTCAATCTTGCTTAGAAT 1
 RESULT 332
 ADT00671
 ID ADT00671 standard; DNA; 20 BP.
 XX
 AC ADT00671;
 XX
 DT 16-DEC-2004 (first entry)
 XX
 DE Novel mutant protein tyrosine kinase-related oligonucleotide SeqID659.
 XX
 KW tyrosine kinase; cancer; anti-cancer agent; signalling molecule;
 KW tumorigenesis; somatic alteration; colorectal cancer; NTRK3; FES;
 KW GUCY2F; MCCK; MLK4; kinase domain; cytosstatic; tyrosine kinase inhibitor;
 KW guanylate cyclase stimulator; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2004082458-A2.
 XX
 PD 30-SEP-2004.
 XX
 PF 18-FEB-2004; 2004WO-US004452.
 XX
 XX 21-FEB-2003; 2003US-0448537P.
 PR 29-MAY-2003; 2003US-0473895P.
 PR
 PA (UYJO) UNIV JOHNS HOPKINS.
 XX
 XX Bardelli A, Parsons W, Velculescu V, Kinzler KW, Vogelstein B;
 PI WPI; 2004-718702/70.
 DR
 XX Activated mutant protein tyrosine kinases (e.g. NTRK3, FES and MCCK) and
 PT associated methods for diagnosing cancer and screening for anti-cancer
 PT agents.
 XX
 XX Disclosure; SEQ ID NO 659; 363pp; English.
 PS This invention relates to a novel activated mutant protein tyrosine
 CC kinases and associated methods for diagnosing cancer and screening for
 CC anti-cancer agents. Protein kinases are signalling molecules involved in
 CC tumorigenesis. Mutational analysis of the human tyrosine kinase gene

CC family identified somatic alteration sin 1 in 5 colorectal cancers, with
CC the majority of mutations occurring in the NTRK3, FES, GUCY2F and
CC MCCK/MLK4 genes. Most were identified in the kinase domain. The invention
CC may be useful for the production of compounds with a cytostatic activity
CC acting as protein tyrosine kinase inhibitors or guanylate cyclase
CC stimulators. The invention may be useful for developing methods for
CC detecting mutations involved in cancer or screening for anti-cancer
CC agents. The present sequence is that of a human-derived oligonucleotide
CC which is related to the invention.

XX SQ Sequence 20 BP; 1 A; 6 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 2.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 3081 TGTTCACATTTTCCTTTTGG 3100

||| ||||| ||||| |||||

1 TGTGCACATTTTCCTTTTGG 20

RESULT 333

ADT01064/c

ID ADT01064 standard; DNA; 20 BP.

XX AC ADT01064;

XX DT 16-DEC-2004 (first entry)

XX DE Novel mutant protein tyrosine kinase-related oligonucleotide SeqID1052.

XX KW tyrosine kinase; cancer; anti-cancer agent; signalling molecule;

XX KW tumorigenesis; somatic alteration; colorectal cancer; NTRK3; FES;

XX KW GUCY2F; MCCK; MLK4; kinase domain; cycostatic; tyrosine kinase inhibitor;

XX KW guanylate cyclase stimulator; ss.

XX OS Homo sapiens.

XX PN WO2004082458-A2.

XX PD 30-SEP-2004.

XX PF 18-FEB-2004; 2004WO-US004452.

XX PR 21-FEB-2003; 2003US-0448537P.

XX PR 29-MAY-2003; 2003US-0473895P.

XX PA (UYJO) UNIV JOHNS HOPKINS.

XX PI Bardelli A, Parsons W, Velculescu V, Kinzler KW, Vogelstein B;

XX WPI; 2004-718702/70.

XX Activated mutant protein tyrosine kinases (e.g. NTRK3, FES and MCCK) and
PT associated methods for diagnosing cancer and screening for anti-cancer
PT agents.

XX PS Disclosure; SEQ ID NO 1052; 363pp; English.

XX This invention relates to a novel activated mutant protein tyrosine
CC kinases and associated methods for diagnosing cancer and screening for
CC anti-cancer agents. Protein kinases are signalling molecules involved in
CC tumorigenesis. Mutational analysis of the human tyrosine kinase gene
CC family identified somatic alteration sin 1 in 5 colorectal cancers, with
CC the majority of mutations occurring in the NTRK3, FES, GUCY2F and
CC MCCK/MLK4 genes. Most were identified in the kinase domain. The invention
CC may be useful for the production of compounds with a cytostatic activity
CC acting as protein tyrosine kinase inhibitors or guanylate cyclase
CC stimulators. The invention may be useful for developing methods for
CC detecting mutations involved in cancer or screening for anti-cancer
CC agents. The present sequence is that of a human-derived oligonucleotide
CC which is related to the invention.

SQ Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.4%; Score 15.2; DB 1; Length 20;

Best Local Similarity 85.0%; Pred. No. 2.3e+02;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1857 CAGCATTTCACAGTAGTCT 1876

||||| ||||| ||||| |||||

20 CAGCACTTCCCAAGTAGCCT 1

RESULT 334

AAV36994

ID AAV36994 standard; DNA; 17 BP.

XX AC AAV36994;

XX DT 24-SEP-1998 (first entry)

XX DE Nucleotide sequence of the PCR primer 15.

XX KW PCR; primer; amplification; type II diabetes; agonist; antagonist;
XX KW hepatic nuclear factor 4; HNF-4; HNF gene; anti-HNF antibody; insulin;
XX KW diabetes mellitus; mature onset diabetes of the young; MODY; MODY1 gene;
XX KW MODY3 gene; ss.

XX OS Synthetic.

XX PN WO98211363-A1.

XX PD 22-MAY-1998.

XX PF 14-NOV-1997; 97WO-US020759.

XX PR 15-NOV-1996; 96US-00749430.

XX PA (MILL-) MILLENNIUM PHARM INC.

XX PI Glucksmann AM, Thomas J;

XX WPI; 1998-297964/26.

XX Treating type II diabetes involving hepatic nuclear factor 4 - useful,
PT e.g. to treat insufficient HNF expression or bioactivity, overexpression
PT of HNF or expression of mutant HNF gene in diabetic patients.

XX PS Disclosure; Page 86; 116pp; English.

XX This is the nucleotide sequence of the PCR primer used for amplification
CC in the method of invention, involving the treatment of type II diabetes
CC with hepatic nuclear factor 4 (HNF-4). The agonists of normal HNF
CC bioactivity can be used to treat diabetes, e.g. to ameliorate disease
CC symptoms involving insufficient expression of an HNF gene and/or
CC inadequate functional HNF bioactivity in a subject. The antagonists of a
CC disease-causing HNF bioactivity can be used to treat diabetes, e.g. to
CC ameliorate disease symptoms involving expression of a mutant HNF gene or
CC overexpression of a normal HNF gene. It is also useful to ameliorate
CC disease symptoms involving a mutant (non-functional) HNF protein e.g. by
CC administering a therapeutically effective amount of an anti-HNF antibody.
CC Protein that binds to the mutant HNF-4 protein is useful in screening
CC assays, e.g. to identify antagonists/agonists of an interaction between a
CC HNF protein and a binding protein to develop drugs for disease treatment.
CC Diabetes mellitus is a common metabolic disorder, and most cases are type
CC II (non-insulin dependent diabetes mellitus (NIDDM)). A major genetic
CC component is implicated, but few genes have been identified. Mature onset
CC diabetes of the young (MODY) loci have been linked to rare early-onset
CC forms, but genes for MODY1 and MODY3 have not been identified. HNF-4 is
CC encoded by a gene mapping within the MODY1 locus

XX SQ Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 402 CTGCAGGTGCTGGAT 416
|||||
Db 2 CTGCAGGTGCTGGAT 16

RESULT 335
AAV41419
ID AAV41419 standard; DNA; 17 BP.
XX
AC AAV41419;
XX
DT 24-SEP-1998 (first entry)
XX
DE Nucleotide sequence of 3' PCR primer 18.
XX
KW PCR; primer; amplification; hepatic nuclear factor; HNF; diabetes;
type II diabetes; HNF1 gene; transcription factor; insulin; ss.
XX
OS Synthetic.
XX
PN WO9821239-A2.
XX
PD 22-MAY-1998.
XX
PF 07-NOV-1997; 97WO-US020532.
XX
PR 12-NOV-1996; 96US-00748229.
PR 15-NOV-1996; 96US-00749431.
PR 04-DEC-1996; 96US-00760246.
PR 10-JAN-1997; 97US-00782047.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Glucksmann AM;
XX
DR WPI; 1998-297866/26.
XX
PT Treating type II diabetes with agent - useful for, e.g. modulating
expression of hepatic nuclear factor or other diabetes-related gene.
XX
PS Disclosure; Page 80; 113pp; English.
XX
CC This is the nucleotide sequence of the PCR primer used for amplification
in the method of the invention, which involves modulating the expression
of hepatic nuclear factor or other diabetes related gene. The method is
used to treat early onset type II diabetes and defects in insulin
secretion. It is based on the discovery that certain mutations in the
CC HNF1 gene, encoding a transcription factor, are involved in these
conditions
XX
SQ Sequence 17 BP; 2 A; 3 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 402 CTGCAGGTGCTGGAT 416
|||||
Db 2 CTGCAGGTGCTGGAT 16

RESULT 336
AAF04657/C
ID AAF04657 standard; DNA; 17 BP.
XX
AC AAF04657;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #2173.
XX

KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
useful for producing e.g. granulocyte colony stimulating factor protein,
interferon alpha and erythropoietin.
XX
PS Claim 4; Page 105; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
molecules that act as inhibitors of the expression of repressor genes
encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
factor gene, IRF-2 and/or the C/EBP Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
consequently increases expression of) genes involved in the production of
erythropoietin, granulocyte colony stimulating factor protein and
interferon alpha
XX
SQ Sequence 17 BP; 5 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1896 CAGAATGACTTTGCT 1910
|||||
Db 15 CAGAATGACTTTGCT 1

RESULT 337
AAF04209/C
ID AAF04209 standard; DNA; 17 BP.
XX
AC AAF04209;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #1725.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX

XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
XX
PS Claim 4; Page 95; 164pp; English.
XX
XX The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 5 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1896 CAGATGACTTTGCT 1910
DB 15 CAGATGACTTTGCT 1
RESULT 338
ABK03219/c
ID ABK03219 standard; RNA; 17 BP.
XX
AC ABK03219;
XX
XX 12-MAR-2002 (first entry)
XX
DE Human CD20 Inozyme #170.
XX
XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNazyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX WO200159103-A2.
XX
XX 16-AUG-2001.
XX
XX 09-FEB-2001; 2001WO-US004273.
XX
XX 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
XX Blatt L, Mcswiggen J, Chowrira BM;
PI WPI; 2001-607195/69.
XX
XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
XX central nervous system injury.
XX
PS Claim 30; Page 148; 200pp; English.
XX
XX The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNazyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA motif) or
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
CC an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA
CC with a XGY motif). The CD20-targeting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targeting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 3797 CTGACAGGAGACTA 3811
DB 17 CTGACAGGAGACTA 3
RESULT 339
ABK03220/c
ID ABK03220 standard; RNA; 17 BP.
XX
AC ABK03220;
XX
XX 12-MAR-2002 (first entry)
XX
DE Human CD20 Inozyme #171.
XX
XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNazyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.

OS Synthetic.
 PN WO200159103-A2.
 PD 16-AUG-2001.
 PP 09-FEB-2001; 2001WO-US004273.
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX Blatt L, Mcswiggen J, Chowrira BM;
 PI WPI; 2001-607195/69.
 DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX Claim 30; Page 148; 200pp; English.
 PS The invention relates to a nucleic acid molecule which down regulates
 XX expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is an inozyme of the invention
 XX Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;
 SQ Query Match 0.4%; Score 15; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3797 CTGACAGGAGACTA 3811
 DB 15 CTGACAGGAGACTA 1
 RESULT 340
 ABK02853/c

ID ABK02853 standard; RNA; 17 BP.
 XX AC ABK02853;
 XX DT 12-MAR-2002 (first entry)
 XX DE Human CD20 Hammerhead ribozyme #152.
 XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNzyme; inozyme; G-cleaver; amberyzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX Homo sapiens.
 OS Synthetic.
 OS WO200159103-A2.
 PN 16-AUG-2001.
 PD 09-FEB-2001; 2001WO-US004273.
 PF 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX Blatt L, Mcswiggen J, Chowrira BM;
 PI WPI; 2001-607195/69.
 DR Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.
 XX Claim 30; Page 142; 200pp; English.
 CC The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The
 CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
 CC an amberyzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more

CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a hammerhead ribozyme of the invention

XX SQ Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3797 CTGACAGGAGACTA 3811
Db 16 CTGACAGGAGACTA 2

RESULT 341
AA21944/c
ID AAX21944 standard; DNA; 20 BP.
XX AC AAX21944;
XX DT 18-MAY-1999 (first entry)
XX DE Human B-raf kinase antisense oligonucleotide Isis#14141.
XX KW Antisense oligonucleotide; B-raf; human; inhibitor; T-cell activation;
XX KW hyperproliferative disorder; cancer; restenosis; psoriasis;
XX KW atherosclerosis; raf-associated tumour; diagnosis; therapy; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT FT /*tag= a
FT FT /notes="phosphorothioate bases"
XX WO9902167-A1.
XX PD 21-JAN-1999.
XX PF 06-JUL-1998; 98WO-US013961.
XX PR 07-JUL-1997; 97US-00888982.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Monia BP;
XX DR WPI; 1999-120502/10.
XX PT New antisense oligonucleotides - for modulation of human B-raf gene
XX PT expression.
XX PS Disclosure; Page 22; 72pp; English.

CC This sequence represents an example of an antisense oligonucleotide of
CC the invention. The oligonucleotides are 8-50 nucleotides in length, and
CC are targeted to a nucleic acid encoding human B-raf and which is capable
CC of inhibiting human B-raf expression. The oligonucleotides is used to
CC inhibit the (abnormal) expression of human B-raf, to inhibit
CC hyperproliferation of cells, to treat or prevent an abnormal
CC proliferative condition, e.g. hyperproliferative disorders such as cancer
CC (e.g. of the brain or nervous system), restenosis, psoriasis or a
CC disorder characterised by T-cell activation and growth. They may also be
CC used to diagnose these diseases, as well as atherosclerosis. The
CC oligonucleotides of the invention may be used to distinguish raf-
CC associated tumours from tumours having other etiologies. The antisense

CC oligonucleotides can also be used to quantify raf expression in assays

XX SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1467 AAACAAATGAGTGAG 1481
Db 20 AAACAAATGAGTGAG 6

RESULT 342
ABT13950
ID ABT13950 standard; DNA; 20 BP.
XX AC ABT13950;
XX DT 13-FEB-2003 (first entry)
XX DE Human helicase-moi inhibiting oligonucleotide #75.
XX KW Human; antisense gene therapy; phosphorothioate backbone;
XX KW antisense oligonucleotide; helicase-moi gene; inflammation; ss;
XX KW helicase-moi-associated condition; infection; tumour formation;
XX KW 2-MOE nucleotide; 2'-methoxyethyl nucleotide.
XX OS Homo sapiens.
XX PN US6444466-B1.
XX PD 03-SEP-2002.
XX PF 10-MAY-2001; 2001US-00853768.
XX PR 10-MAY-2001; 2001US-00853768.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Ward DT, Watt AT;
XX DR WPI; 2002-749291/81.
XX PT Novel antisense compound for modulating expression of human helicase-moi
XX PT and for treating inflammation, specifically hybridizes to a specific
XX PT region in nucleic acid molecule encoding the human helicase-moi.
XX PS Claim 3; Col 45-46; 52pp; English.

CC The invention comprises antisense oligonucleotides which are targeted to
CC the coding region of the human helicase-moi gene. The antisense
CC oligonucleotides of the invention are useful for inhibiting the
CC expression of human helicase-moi in cells or tissues, and for treating a
CC helicase-moi-associated condition. The antisense oligonucleotides of the
CC invention may also be used to delay infection, inflammation and tumour
CC formation. The present DNA sequence represents a human helicase-moi gene
CC antisense oligonucleotide of the invention. NOTE: The present DNA
CC sequence has a phosphorothioate backbone, bases 1-5 and 16-20 are 2'-
CC methoxyethyl (2'-MOE) nucleotides

XX SQ Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.4%; Score 15; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2331 ATCCATGAAGTTTC 2345
Db 4 ATCCATGAAGTTTC 18

RESULT 343

AAD44803/c
 ID AAD44803 standard; DNA; 20 BP.
 XX
 AC AAD44803;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Human B-raf kinase antisense oligonucleotide ISIS #14141.
 XX
 KW Human; raf; hyperproliferation; neovascularisation; ocular angiogenesis;
 KW therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
 KW antisense; phosphorothioate backbone; B-raf kinase; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 XX
 PN US6410518-B1.
 XX
 PD 25-JUN-2002.
 XX
 PF 18-FEB-2000; 2000US-00506073.
 XX
 PR 31-MAY-1994; 94US-00250856.
 PR 31-MAY-1995; 95WO-US007111.
 PR 26-NOV-1996; 96US-00756806.
 PR 07-JUL-1997; 97US-00888982.
 PR 06-JUL-1998; 98WO-US013961.
 PR 28-AUG-1998; 98US-00143214.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP;
 XX
 DR WPI; 2002-597918/64.
 XX
 PT Treating cancer, angiogenesis or neovascularization by administering
 PT antisense oligonucleotides targeted to human raf sequences.
 XX
 PS Example 18; Col 26; 41pp; English.
 XX
 CC The present invention relates to novel antisense oligonucleotides which
 CC are targeted to nucleic acids encoding human raf proteins and capable of
 CC inhibiting raf expression. The invention also relates to methods of
 CC inhibiting hyperproliferation of cells which involves contacting the
 CC hyperproliferating cells with a therapeutically effective amount of an
 CC oligonucleotide of the invention. The method is useful for treating
 CC cancer, angiogenesis or neovascularisation, especially ocular
 CC angiogenesis or neovascularisation. The present DNA sequence is an
 CC antisense oligonucleotide targeted to human B-raf kinase
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1467 AAACAAATGAGTGAG 1481
 DB 20 AAACAAATGAGTGAG 6
 RESULT 344
 ID ADF09797/c
 XX ADF09797 standard; DNA; 20 BP.
 AC ADF09797;
 XX

DT 12-FEB-2004 (first entry)
 XX
 DE Human b-raf kinase antisense oligonucleotide seq id 66.
 XX
 KW tumour metastasis; human; raf; raf expression inhibitor; cytostatic;
 KW antiarteriosclerotic; antisense-therapy; hyperproliferative disorder;
 KW atherosclerosis; tumour; b-raf kinase; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 PN US2003119769-A1.
 XX
 PD 26-JUN-2003.
 XX
 PF 14-JUN-2002; 2002US-00173225.
 XX
 PR 31-MAY-1994; 94US-00250856.
 PR 31-MAY-1995; 95WO-US007111.
 PR 26-NOV-1996; 96US-00756806.
 PR 07-JUL-1997; 97US-00888982.
 PR 06-JUL-1998; 98WO-US013961.
 PR 28-AUG-1998; 98US-00143214.
 PR 18-FEB-2000; 2000US-00506073.
 PR 25-JAN-2002; 2002US-00057550.
 XX
 PA (MONI/) MONIA B P.
 XX
 PI Monia BP;
 XX
 DR WPI; 2003-863446/80.
 XX
 PT Preventing and/or treating conditions associated with raf expression,
 PT such as hyperproliferative disorders, atherosclerosis and tumors, using
 PT antisense oligonucleotide modulation of human raf gene expression.
 XX
 PS Example 18; SEQ ID NO 93; 41pp; English.
 XX
 CC The invention describes a method of preventing or treating tumour
 CC metastasis in an animal comprising administering to the animal an
 CC oligonucleotide 8-50 nucleotides in length, which is targeted to mRNA
 CC encoding human raf and capable of inhibiting raf expression. Also
 CC disclosed are raf oligonucleotides, nucleic acids, proteins and
 CC compositions used in the methods of the invention. The oligonucleotides
 CC have cytostatic and antiarteriosclerotic properties, are useful as Raf-
 CC inhibitors and in antisense-therapy. The methods and compositions of the
 CC present invention are useful for preventing and/or treating conditions
 CC associated with raf expression, such as hyperproliferative disorders,
 CC atherosclerosis and tumors. This sequence represents a human b-raf
 CC kinase antisense oligonucleotide.
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1467 AAACAAATGAGTGAG 1481
 DB 20 AAACAAATGAGTGAG 6
 RESULT 345
 ID ABZ86360 standard; DNA; 20 BP.
 XX
 AC ABZ86360;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 1602; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2883 GTCCTCCAGTGGGC 2897
 DB 20 GTCCTCCAGTGGGC 6
 RESULT 346
 ID ABZ86408/C
 XX ABZ86408 standard; DNA; 20 BP.
 AC ABZ86408;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Claim 15; SEQ ID NO 1650; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 13 A; 2 C; 1 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3305 TTTTATTTTATAT 3319
 DB 15 TTTTATTTTATAT 1
 RESULT 347
 ID ACD42186/c
 XX ACD42186 standard; DNA; 20 BP.
 AC ACD42186;
 XX
 DT 05-SEP-2003 (first entry)
 XX
 DE Antisense oligonucleotide targeting human b-raf, ISIS14141.
 XX
 KW Human; ss; antisense; c-raf; a-raf; b-raf; protein kinase; cancer;
 KW signal transduction; cell proliferation; lung carcinoma; cytostatic;

KW antisense gene therapy; chemotherapeutic agent; angiogenesis;
 KW hyperproliferative condition; neovascularisation; ocular angiogenesis.
 XX
 OS Homo sapiens.
 OS
 PN US2003032607-A1.
 XX
 PD 13-FEB-2003.
 XX
 PF 25-JAN-2002; 2002US-00057550.
 XX
 PR 31-MAY-1994; 94US-00250856.
 PR 31-MAY-1995; 95WO-US007111.
 PR 26-NOV-1996; 96US-00756806.
 PR 07-JUL-1997; 97US-00888982.
 PR 06-JUL-1998; 98WO-US013961.
 PR 28-AUG-1998; 98US-00143214.
 PR 18-FEB-2000; 2000US-00506073.
 XX
 PA (MONI/) MONIA B P.
 XX
 PI Monia BP;
 XX
 DR WPI; 2003-503332/47.
 XX
 PT Novel antisense oligonucleotide which is targeted to mRNA encoding human
 PT raf and which is capable of inhibiting raf expression, useful for
 PT treating or preventing hyperproliferative conditions such as cancer.
 PT
 PS Example 18; Page 14; 42pp; English.
 XX
 CC The invention relates to an oligonucleotide 8-50 nucleotides in length
 CC which is targeted to mRNA encoding human c-raf, a-raf or b-raf (raf is a
 CC protein kinase playing a regulatory role in signal transduction,
 CC regulating cell proliferation and has been implicated in lung carcinoma),
 CC and which is capable of inhibiting raf expression. Also included is a
 CC composition comprising the oligonucleotide and a pharmaceutically
 CC acceptable carrier. The antisense oligonucleotide is useful for
 CC inhibiting the expression of human raf in human cells or tissues, by
 CC contacting the human cells or tissues with the oligo. The oligo, is also
 CC is useful for treating or preventing a disease or condition associated
 CC with the expression of raf by administering it in combination with a
 CC chemotherapeutic agent to a human or cells of the human, where the
 CC expression of raf is abnormal expression, and the condition is a
 CC hyperproliferative condition such as cancer, angiogenesis or
 CC neovascularisation (preferably ocular angiogenesis or
 CC neovascularisation). The oligo, is also useful for inhibiting
 CC hyperproliferation of cells. The oligos, are also useful as tools, for
 CC example for detecting and determining the role of raf expression in
 CC various cell functions and physiological processes and conditions and for
 CC diagnosing conditions associated with raf expression and for research
 CC purposes. The present sequence is an antisense oligonucleotide targeting
 CC a human raf mRNA
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 1 G; 10 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1467 AAACAATGAGTGAG 1481
 |||||
 DB 20 AAACAATGAGTGAG 6
 RESULT 348
 ID ADN60155
 XX ADN60155 standard; DNA; 20 BP.
 XX
 AC ADN60155;
 XX
 AC
 DT 01-JUL-2004 (first entry)
 XX

DE Human helicase-moi, antisense oligonucleotide #75.
 XX
 KW Cytostatic; Antisense therapy; ss; human; helicase-moi; inflammation;
 KW hyperproliferative disorder; RNA-mediated interference; probe.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT *tag= b
 FT /mod_base= Other
 FT /note= "Phosphorothioate linkages. All cytidines are 5'-
 FT methylcytidines"
 FT modified_base 1..5
 FT *tag= a
 FT /mod_base= Other
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 FT modified_base 16..20
 FT *tag= c
 FT /mod_base= Other
 FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
 XX
 XX US2003176380-A1.
 PN
 XX 18-SEP-2003.
 PD
 XX 31-MAY-2002; 2002US-00160632.
 PF
 XX 10-MAY-2001; 2001US-00853768.
 PR
 XX (WARD/) WARD D T.
 PA (WATT/) WATT A T.
 PA
 XX Ward DT, Watt AT;
 XX
 XX WPI; 2003-898586/82.
 DR
 XX New antisense oligonucleotides for modulating helicase-moi expression,
 PT useful for diagnosing, preventing or treating diseases or conditions
 PT associated with helicase-moi, e.g. inflammation or hyperproliferative
 PT disorders.
 PT
 XX Claim 3; SEQ ID NO 88; 56pp; English.
 PS
 CC The invention relates to antisense oligonucleotides, compositions and
 CC methods for modulating the expression of helicase-moi. The
 CC oligonucleotides are used in treating an animal having a disease or
 CC condition associated with helicase-moi, such as inflammation, a
 CC hyperproliferative disorder or a condition that arises from RNA-mediated
 CC interference. The present sequence represents a human helicase-moi
 CC antisense oligonucleotide.
 CC
 XX Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 2331 ATCCATGAAGGTTTC 2345
 |||||
 DB 4 ATCCATGAAGGTTTC 18
 RESULT 349
 ID ABD22590/c
 XX ABD22590 standard; DNA; 20 BP.
 XX
 AC ABD22590;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Human cathepsin C-derived oligo SEQ ID 1602.
 XX

KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX Homo sapiens.
 OS
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 1602; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2883 GTCCTCCAGGTGGC 2897
 |||||
 DB 20 GTCCTCCAGGTGGC 6

RESULT 350
 ABD22638/c
 ID ABD22638 standard; DNA; 20 BP.

XX ABD22638;

AC ABD22638;

XX 29-JUL-2004 (first entry)

XX Human myosin X-derived oligonucleotide SEQ ID 1650.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

OS WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 1650; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 13 A; 2 C; 1 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3305 TTTTATTTTATAT 3319
 DB 15 TTTTATTTTATAT 1

RESULT 351
 ADI66983/c
 ID ADI66983 standard; DNA; 20 BP.
 XX
 AC ADI66983;
 XX
 XX
 DT 22-APR-2004 (first entry)
 DE Human DEXRAS1 DNA antisense oligonucleotide target region #24.
 XX
 KW Human; DEXRAS1; ss; antisense oligonucleotide; phosphorothioate linkage;
 KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
 KW hyperproliferative disorder; cancer; neurological disorder;
 KW aberrant nitric oxide signalling; inflammation; tumour formation;
 KW cytostatic; neuroprotective; antiinflammatory; antimicrobial.
 XX
 OS Homo sapiens.
 XX
 PN US2004005706-A1.
 XX
 PD 08-JAN-2004.
 XX
 PF 28-JUN-2002; 2002US-00185035.
 XX
 PR 28-JUN-2002; 2002US-00185035.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP, Dobie KW;
 XX
 DR WPI; 2004-081730/08.
 XX
 PS New antisense compounds targeted to nucleic acid molecules encoding
 PT DEXRAS1, useful for treating diseases associated with expression of
 PT DEXRAS1, e.g. neurological disorder or hyperproliferative disorder such
 PT as cancer.
 XX
 PS Example 15; SEQ ID NO 114; 62pp; English.
 XX
 CC The invention relates to an antisense oligonucleotide targeted to a
 CC nucleic acid encoding the human DEXRAS1 polypeptide which specifically
 CC hybridises with the nucleic acid molecule and inhibits the expression of
 CC DEXRAS1. The antisense oligonucleotide comprises at least one modified
 CC internucleoside linkage, i.e. a phosphorothioate linkage, at least one
 CC modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at
 CC least one modified nucleobase comprising a 5-methylcytosine. The
 CC antisense oligonucleotides and compounds are useful for inhibiting the
 CC expression of DEXRAS1 and for treating diseases or conditions associated
 CC with expression of DEXRAS1, e.g. hyperproliferative disorders such as
 CC cancer, neurological disorders or a disease or condition arising from
 CC aberrant nitric oxide signalling. The antisense compounds are also useful
 CC as research reagents and kits or in diagnostic, therapeutic and
 CC prophylactic applications, e.g. to prevent or delay infection,
 CC inflammation or tumour formation. This sequence represents an antisense
 CC oligonucleotide target region of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2509 AGGTGGAGCTGTACC 2523
 DB 20 AGGTGGAGCTGTACC 6

RESULT 352
 ADI66926
 ID ADI66926 standard; DNA; 20 BP.
 XX
 AC ADI66926;
 XX
 DT 22-APR-2004 (first entry)
 DE Human DEXRAS1 DNA antisense oligonucleotide #45.
 XX
 KW Human; DEXRAS1; ss; antisense oligonucleotide; phosphorothioate linkage;
 KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
 KW hyperproliferative disorder; cancer; neurological disorder;
 KW aberrant nitric oxide signalling; inflammation; tumour formation;
 KW cytostatic; neuroprotective; antiinflammatory; antimicrobial.
 XX
 OS Homo sapiens.
 XX
 PN US2004005706-A1.
 XX
 PD 08-JAN-2004.
 XX
 PF 28-JUN-2002; 2002US-00185035.
 XX
 PR 28-JUN-2002; 2002US-00185035.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP, Dobie KW;
 XX
 DR WPI; 2004-081730/08.
 XX
 PS New antisense compounds targeted to nucleic acid molecules encoding
 PT DEXRAS1, useful for treating diseases associated with expression of
 PT DEXRAS1, e.g. neurological disorder or hyperproliferative disorder such
 PT as cancer.
 XX
 PS Example 15; SEQ ID NO 57; 62pp; English.
 XX
 CC The invention relates to an antisense oligonucleotide targeted to a
 CC nucleic acid encoding the human DEXRAS1 polypeptide which specifically
 CC hybridises with the nucleic acid molecule and inhibits the expression of
 CC DEXRAS1. The antisense oligonucleotide comprises at least one modified
 CC internucleoside linkage, i.e. a phosphorothioate linkage, at least one
 CC modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at
 CC least one modified nucleobase comprising a 5-methylcytosine. The
 CC antisense oligonucleotides and compounds are useful for inhibiting the
 CC expression of DEXRAS1 and for treating diseases or conditions associated
 CC with expression of DEXRAS1, e.g. hyperproliferative disorders such as
 CC cancer, neurological disorders or a disease or condition arising from
 CC aberrant nitric oxide signalling. The antisense compounds are also useful
 CC as research reagents and kits or in diagnostic, therapeutic and
 CC prophylactic applications, e.g. to prevent or delay infection,
 CC inflammation or tumour formation. This sequence represents an antisense
 CC oligonucleotide of the invention.
 XX
 SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.4%; Score 15; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 2.4e+02;
 Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2509 AGGTGGAGCTGTACC 2523
 DB 1 AGGTGGAGCTGTACC 15

Search completed: February 16, 2005, 09:23:22
Job time : 17 secs

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OM nucleic - nucleic search, using sw model

Run on: February 16, 2005, 09:29:15 ; Search time 0.001 Seconds
(without alignments)
144.818 Million cell updates/sec

Title: us-10-001-863-3
Perfect score: 3811
Sequence: 1 acagggcactgctgtcac.....tctcactgacagggaacta 3811

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 0.5

Searched: 1 seqs, 19 residues

Total number of hits satisfying chosen parameters: 2

Minimum DB seq length: 8
Maximum DB seq length: 80

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1 summaries

Database : rstdb:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	15.8	0.4	19	1 BX551013	ACCESSION:BX551013

ALIGNMENTS

RESULT 1
BX551013
LOCUS
DEFINITION BX551013 Glossina morsitans morsitans adult infected gut Glossina
morsitans morsitans cDNA clone Tse116a12_q1c, mRNA sequence.
ACCESSION BX551013
VERSION BX551013.1 GI:33374827
SOURCE EST.
ORGANISM Glossina morsitans morsitans
Glossina morsitans morsitans
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Hippoboscoidae; Glossinidae; Glossina.
1 (bases 1 to 19)
Lehane, M.J., Aksoy, S., Gibson, W., Kexhornou, A., Berriman, M.,
Hamilton, J., Soares, M.B., Bonaldo, M.P., Lehane, S. and Hall, N.
Adult midgut expressed sequence tags from the tsetse fly Glossina
morsitans morsitans and expression analysis of putative immune
response genes
JOURNAL Genome Biol. 4 (10), R63 (2003)
MEDLINE 22881942
PUBMED 14519198
COMMENT
Contact: Hall N
Pathogen Sequencing Unit
The Sanger Institute The Wellcome Trust Genome Campus
Hinxton, Cambridge, CB10 1SA, UK
Request for clones, please contact: Mike Lehane

Prof. M.J. Lehane
School of Biological Sciences,
University of Wales,
Bangor LL57 2UW

All clones with suffix q1c are reverse primer reads starting at 5'
end of the cDNA all pic reads are from
the 3' end.

FEATURES
source

Location/Qualifiers
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/sub_species="morsitans"
/db_xref="taxon:37546"
/clone="Tse116a12_q1c"
/tissue_type="adult infected gut"
/clone_lib="Glossina morsitans morsitans adult infected
gut"
/note="country: Zimbabwe; EST from adult gut infected with
T.brucei"

Query Match 0.4%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 0;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1974 GTTGACGCAATGGAATGTG 1992
||||||| ||| |||||
Db 1 GTTGACGCAATGGAATGTG 19

Search completed: February 16, 2005, 09:29:16
Job time : 0.001 secs

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